DOCUMENT RESUME

ED 096 365 UD 014 526

TITLE	An Evaluation of the ESEA Title I and State Urban Programs: Community School District, New York City Board of Education. Final Report.
INSTITUTION	Teaching and Learning Research Corp., New York, N.Y.
SPONS AGENCY	New York City Board of Education, Brooklyn, N.Y.
PUB DATE	[74]
NOTE	177p.; Function #33-4-1653--1662 and 33-4-6402--6404
EDRS PRICE	MF-$0.75 HC-$9.00 PLUS POSTAGE
DESCRIPTORS	African American Studies; Biculturalism; Bilingual Education; Chinese Americans; English (Second Language); Paraprofessional School Personnel; *Program Evaluation; *Reading Programs; Spanish Speaking; *State Programs; *Urban Education; Work Study Programs
IDENTIFIERS	Elementary Secondary Education Act Title I; ESEA Title I; New York City

ABSTRACT

This document covers 12 Community School District 1 ESEA Title I programs and State Urban Education porgrams. The Comprehensive Reading Program had four components. The Bilingual-Bicultural Program was funded jointly by Title I and Title VII. The Elementary Bilingual Program afforded Spanish-speaking pupils an early opportunity to experience academic success. The Chinese-English Bilingual Program provided remedial support for ethnic Chinese children. The Secondary Bilingual Program provided instruction in major course areas in Spanish while teaching English as a second language. The Paraprofessional Training Unit provided training for paraprofessionals. Homework Helper Program was assigned to five elementary and two junior high schools. The Non-Public Schools Program provided educational assistants to serve selected Title I eligible non-public pupils. Project Math was instituted in 16 elementary and 4 junior high schools. The Work -Study Reading and Math Program provided academic remediation to junior high school students. The Uplifting Skills Program served grades K-6. The Black Studies Approach to Reading and Math program focused on those black students who suffer severely from lack of positive self-esteem. (Author/JM)

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TEACHING & LEARNING
RESEARCH CORP

DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

AN EVALUATION OF THE ESEA TITLE I AND STATE URBAN PROGRAMS

COMMUNITY SCHOOL DISTRICT
NEW YORK CITY
BOARD OF EDUCATION

FINAL REPORT

UD 014320

TITLES AND FUNCTION NUMBERS

COMPREHENSIVE READING PROGRAM	33-4-1653
BILINGUAL-BICULTURAL PROGRAM IN CONJUNCTION WITH TITLE VII	33-4-1654
ELEMENTARY BILINGUAL PROGRAM	33-4-1655
CHINESE BILINGUAL PROGRAM	33-4-1656
SECONDARY BILINGUAL PROGRAM	33-4-1657
PARAPROFESSIONAL TRAINING UNIT	33-4-1658
HOMEWORK HELPER PROGRAM	33-4-1659
NON-PUBLIC SCHOOLS PROGRAM	33-4-1660
STRENGTHENING MATH PROGRAM	33-4-1661
WORK STUDY READING AND MATH PROGRAM STATE URBAN	33-4-1662
PROJECT MATH	33-4-6402
UPLIFTING SKILLS CENTER PROGRAM	33-4-6403
BLACK STUDIES APPROACH TO READING AND MATH	33-4-6404

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COMPREHENSIVE READING PROGRAM

Program Description
BRL

Sites

Behavioral Research Laboratories (BRL) was used in eight of the sixteen elementary schools in District I. They were: PS 4, 19, 20, 61, 63, 97, 137 and 140. The program was used in grades K-2 with the target population.

Staffing

Each school was assigned a Title I teacher to coordinate the program. In addition, paraprofessionals were assigned to assist classroom teachers in BRL classes and small group instruction.

Materials

The BRL program consists of a complete package of materials designed to teach reading and decoding skills through a linguistic approach. The program contains a readiness program designed to teach sounds; a set of programmed texts that systematically introduces phonics; a set of comprehension books that is based on the words taught in the workbooks; and a set of service books that handles "exception" words that do not fit into the linguistic model.

Student Population

The target population selected to participate in the program were those children who had been diagnosed by their classroom teachers, grades K-2, as potential reading failures. There were approximately 650 pupils so evaluated and therefore receiving BRL instruction.

Curriculum

The program is designed for one hour and fifteen minutes of reading and related skills instruction per day. Children rotate within the classroom in three basic groups: 1) a teacher led group which concentrates on decoding skills, 2) a paraprofessional led group which concentrates on enrichment activities, and 3) an independent activity group.

BRL cordinating teachers (Title I) and paraprofessionals took the lowest level students out of class at different points during the day for additional BRL instruction.

Procedure

Achievement

1. Sample: The sample consisted of all students in half the elementary schools (listed above) in grades K-2 who had been diagnosed by teacher evaluations as those students most likely to encounter difficulties in reading.

2. Instrumentation: Evaluation of the BRL program was made through site visits and the assessment of pre and post results from MAT scores. The

purpose of this evaluation was to assess the effectiveness of the program.

Using a real versus anticipated gain design, a correlated "t" test was employed to test the null hypothesis which was set at the previous rate of achievement gain. Significance was set at the $P \leq .05$ level. In addition, BRL students were measured against DISTAR pupils. A statistically significant difference between the two groups' performance was anticipated.

Pre-tests were administered in October and November, 1973 to the target population. Post-tests were administered in April, 1974, to the second grade and in May, 1974, to the kindergarten and first grade pupils in the program.

Interviews

Informal interviews were conducted with Title I teachers, with classroom teachers using the program, with paraprofessionals and with the program consultant. Comments made about the program revealed that most teachers using BRL felt comfortable with it. They liked the structure it provided for the students as well as for themselves. Furthermore, they felt that it is rather total in its approach. Classroom teachers liked the idea of three groups working on different projects at the same time because it gave them the opportunity to spend more time with smaller reading groups.

Observations

Beginning February 1, 1974, through the middle of May, 1974, a minimum of two visits were made to each BRL site. Both full class and small group instruction were observed.

Schools varied slightly in the use of the program. While the majority of schools implemented BRL in all K-2 classes in the school, a few did not. This factor seemed to play a small role in the teacher attitudes towards the program.

Most of the schools offered additional BRL instruction to target children requiring greater remediation and/or more individualized instruction. A minority offered BRL as the additional instruction where the child's classroom teacher was using some other material for the reading period.

One of the positive features of BRL is that the program helps to develop independence in primary school age children. In practically all cases observed, children left to work on their own did so.

Observations supported the fear that programmed instruction at this age does not insure learning. The simplicity of the elicited responses (insertion of a single letter or omitting the wrong word) does not guarantee generalization (comprehension).

Moreover, the simplicity of the responses does not require the pupils to do enough writing. The linguistic approach to word attack skills is also binding for the student. His ability to decode words is dependent upon his ability at rhyming sounds. Furthermore, the stories he reads in the comprehension books that accompany the workbooks are limited in word count. The program does not proceed from the child's capacity to handle comprehension of much more complex stories. The lack of aural-oral interaction is another weakness.

While BRL is rather individual in nature, allowing each student to work at his own pace, the program might be more successful if reading classes were grouped more homogenously. In one class observed the spread of the level of student workbooks ranged from Book D to Book 17. Re-grouping classes during the reading period might help teachers form more effective groups.

Summary and Recommendations

Summary

The BRL program provides a rich and stimulating environment for the elementary school child. It provides structure and a strating point for new teachers in finding a way to tackle word attack and reading skills. Research in the field, however, suggests that no one method of word attack should be chosen at the expense of other methods.

The program has some very definite strengths as well as a few pedagogical weaknesses. The fact that so little is demanded in terms of a response from the child seems unsound. A program needed to offer the child some opportunity to interact with the skill to facilitate his learning it. BRL lets the pupil fragment the reading process to such a degree that it could conceivably interfere with the pupil's ability to attack words as complete units, e.g. sight vocabulary acquisition.

The totality of the program and the instructions for its execution are quite a crutch for the new teacher. The teacher's manual is explicit although consultants and Title I teachers did make modifications to accomodate the actual needs of the students. There was some room in the administration of the program for the creative teacher to supplement the activities initiated by the program.

The BRL pupil should be well practiced in following directions as the program is replete with various directions. These changes in direction force the child to become aware of the importance of following specific directions. Furthermore, frequent built-in and end-book tests not only provided good evaluative measures for the teacher, but foster additional direction following for the child.

The engaging nature of the program seemed to have an effect on discipline. Rarely were behavioral problems ever out of hand. The teacher's attention could focus more on the group with whom she was working. Further--more, the support of the paraprofessional, whose function was spelled out in the program, served as a plus in the management of the classroom.

Recommendations

1. Extend BRL through the third grade. The structure it provides will serve in the best interest of third graders.

2. Reduce the reliance on the programmed sections of the programs.

3. Encourage teacher creativity.

4. Limit paraprofessional involvement to enrichment activities as defined by the program.

5. Increase the usage of the supplemental materials that accompany the program.

6. Establish a workshop period for BRL teachers to meet and discuss suggestions for improvement.

7. Define the role of each schools' coordinating Title I teacher.

8. Initiate more group work.

9. Increase aural-oral activities.

DISTAR
Program Description

Sites

Distar was used in eight of the sixteen elementary schools in District I. The schools which used the program were: PS 15, 34, 64, 110, 122, 134, 160 and 188.

Staffing

Each school was assigned a Title I teacher to coordinate the program. Para-professionals were employed generally to execute the language segment of the program.

Materials

The DISTAR program is a self-contained set of materials designed to teach reading and language skills using an "early approach" aural-oral technique. The program comes with a language and reading and related skills kit which are to be used on a fifty-fifty basis during the reading period (one hour).

Student Population

The target population included those students in grades K-2 who were judged by their teachers as potential reading failures. There were approximately 600 students involved in the DISTAR program.

Curriculum

The DISTAR program is composed of two main learning modules - a reading program which systematically introduces the child to the sounds of the language, and a language program which introduces concepts like negation, classification and parts of the whole. Each component is to be taught in half hour segments (back to back), and is to be followed by an independent activity ("take-home" assignments). The classroom teacher teaches the reading and related skills while the paraprofessional teaches the language portion of the package.

Procedure

Achievement

1. Sample: The sample consisted of all students in the program in half the elementary schools (listed on page 4) in grades K-2.

2. Instrumentation: Evaluation of the DISTAR program was made through site visits and the assessment of pre and post-test results of the Metropolitan Achievement Test in reading. The purpose of this evaluation is to measure the effectiveness of the DISTAR program.

Using a real versus anticipated gain design, correlated "t" tests were used to test the null hypothesis which was set at the $P \leq .05$ level. In addition, DISTAR students' achievement will be measured against BRL students. A statistically significant difference between the two groups performance is anticipated.

Pre-tests were administered in October and November, 1973, to the target population. Post-tests were administered in April, 1974, to the second grade and in May, 1974 to the kindergarten and first grade pupils.

Interviews

Following many of the observations were informal interviews with teachers, para-professionals, administrators, Title I teachers coordinating the program and the program consultant.

The general attitude toward the program by those directly involved in it was almost universally favorable. Teachers generally seemed to like the fast result in reading that the program produces. A small minority felt that DISTAR is a rather cumbersome project and that management of it, at best, is poor. A couple of teachers expressed disfavor stating that it slows down the more advanced child who catches on quickly.

Paraprofessionals, especially those who had been involved in other programs prior to DISTAR, spoke with enthusiasm. They felt comfortable using the materials and they, too, enjoyed the results.

Observations

Each of the DISTAR sites have been visited a minimum of two times with each grade level observed at least once in each school since February 1, 1974. Most programs began in the middle of October (except PS 34, 11-1-74). Observations revealed that commitment to the program was practically total. Most groups had advanced on a daily basis as prescribed by the author. A few schools have actually reached level 2 materials within the first year.

Most children seemed to enjoy the choral recitation. Several children, however, did manage to get drowned out by their classmates shouting and therefore overlooked by the teacher or paraprofessional. The emphasis on group activity was perhaps overwhelming for many students.

Practically all teachers observed used the reward system which is built into the program despite its artificial nature. What it achieves is a very incredible signal to the child which will not be continued or reinforced at any other point in his life. In addition, the socialization process which occurs within the program makes it easy to see how children might come to internalize the need to hear artificialities like, "good talking", "good reading", "good sitting", "good thinking", etc.

The majority of teachers observed brought enthusiasm to their task. A few, however, did not. To see this program enacted by anyone in a half-hearted manner really makes clear the artificiality of the instruction. And, unless totally supported by the teacher, this program could be a fiasco.

There were strengths in the program and many were observed. The program does a lot in the way of building and strengthening auditory skills. Children were very careful about adding endings to words. They were cautious in recognizing when and where to pause in their oral reading. What the program does well is to introduce punctuation from the outset.

The orthography used seemed to faciliate learning sounds as compared to other sound drills observed in other programs being used. The orthography is not so different, however, as to alarm users since its variation from regular orthography is slight. One drawback is that the learning of capital letters is delayed until the second level.

Another positive feature of the program is that it systematically introduces irregularities in the language and those children observed who were learning these irregularities seemed to accept them more readily than children in linguistic programs. Similarly, children seemed more involved in comprehension stories accompanying the program than did children using linguistic models. Since decoding is dependent on hearing sounds the letters make, children were more comfortable decoding unfamiliar words. The length of the word being attacked did not seem to unnerve the DISTAR pupil.

Summary and Recommendations

Summary

The results of the DISTAR program are at once commendable and deplorable. Users of this program need to separate what the program does from the methods it uses to accomplish those ends. The question to be considered is the desirability of the hidden agenda of rigid social conformity as a way for learning at such an impressionable age.

Children are taught to respond to hand movements and claps. Children were scolded when they operated prior to or after a signal had been given. The whole idea of choral instruction leaves many questions unanswered. The program is at best, very structured.

Much more individual instruction needs to be built into the program. More consideration for individual difference inlearning need to be observed.

Although the comprehension stories seem to operate from the realization that the child is more sophisticated than traditional basals assume, the program, in general, does not. It appears as though the author assumes that the child comes to school with impaired cognition and little or no ability or facility with language. The program ought to better incorporate that which the child already has mastered in his environment.

What is most positive about the program is the fact that children become familiar, at very early stages of the educational process with information processing. The ways in which they learn to classify, identify, categorize, label, break down and restructure events and objects is sound.

Recommendations

1. Curtail the socialization aspects of the program.
2. Introduce more individualized activities.
3. Build from what the child knows as opposed to following through on those items which assume he knows nothing.
4. Offer rewards that are more consistent with: (a) the child's expectation and, (b) the teacher's personality.
5. Limit use to those teachers who express interest. Do not force a teacher to use the program for successful execution requires commitment.
6. Maintain paraprofessionals only in the language component of the program.
7. Establish workshops for teaching language skills to para-professionals.
8. Rotate target children in reading groups at regular intervals so as to insure the teacher's awareness of each child's abilities and progress.
9. Examine some method to accomodate the three groups within a class with regard to space. Because children are so involved, the noise level soars. The level of activity should not be suppressed but contained.
10. Group students heterogenously.
11. Extend program to the third grade.
12. Support a coordinating teacher for the program in each school to insure smooth administration of the program.

WISCONSIN DESIGN

Program Description

Sites

The Wisconsin Design was used in all elementary schools in District I (PS 4, 15, 19, 20, 34, 61, 63, 64, 97, 110, 122, 134, 137, 140, 160 and 188). The design was implemented in grades 3-6.

Staffing

The program was staffed by a team of five diagnostic teachers. Each school was originally assigned a Title I teacher. Among her duties were implementing of the design, teaching para-professionals the necessary skills for teaching word attack skills, and developing and maintaining resource files for the school. Paraprofessionals were also assigned to each school's program on the basis of the number of students using the program. Subsequently, additional staff had been added to each school. This included an additional Title I teacher and a diagnostic teacher.

Materials

The Wisconsin Design is a diagnostic-prescriptive device which is used to isolate those skills the students need but lack for the decoding of unfamiliar words. The program's basic contribution to the teacher are tests, both pre and post. Aside from tests and some worksheets to reinforce skills, the program's offering is basically bibliographic. By this is meant the program offers suggestions and cites references to find materials for teaching skills. In point of fact, many teachers who sought the suggested books were disilusioned upon finding such limited, usable material. It became clear, and very early on, that each Title I teacher had to begin to compile a host of materials to serve the target population. Thus, the materials varied greatly from school to school with many discrepancies in terms of size and richness of resource files.

Student Population

A scale was established for each grade to determine which students most needed intensive instruction since so many students were two or more years behind in reading. The following cut-off points were imposed for each grade:

Third grade: 1.7 and below
Fourth grade: 2.2 and below
Fifth grade: 2.7 and below
Sixth grade: 3.7 and below

Those students, then, who were to be given additional small group or individualized instruction in grades 3-6 approximately totaled 1700 students.

Curriculum

The program commenced with the administration of P-tests (pre-tests) which were used to determine in which of the forty-five skills the student needed specific instruction. Based on P-test results students were divided into same level-same skill groups and given instruction for 4 to 5 periods a week. Sessions ran from 25 to 55 minutes per day depending on the school.

Approximately three fourths of the target population were serviced by paraprofessionals who did initial teaching of skills. The paraprofessionals had received their instruction from workshops held with the Title I teacher.

Subsequently, another Title I teacher had been added to each school. The load of this new teacher came from the bottom of paraprofessionals loads. In addition, a diagnostic teacher had been added to each school. The diagnostic person administered further tests to the student in an attempt to identify specific learning disabilities. The students who demonstrated the greatest need for individuation were picked up by the diagnostician.

Procedure

Achievement

1. Sample: The sample included all students in the program who were in grades 3-6 in each of the sixteen elementary schools in District I. The scale (listed on page 8) was established to determine those students in greatest need of individual attention.

2. Instrumentation: Evaluation of the Wisconsin Design was made through site visits and the assessment of pre and post results from Metropolitan Achievement Reading Test scores.

Using a real versus anticipated design, a correlated "t" test was employed to test the null hypothesis which was set at the previous rate of achievement gain. Significance was set at the P _ .05 level.

City wide tests were used making the April, 1973 test the pre-test and the April, 1974 test the post-test.

Interviews

Title I teachers and paraprofessionals were approached for interviews preceding and following observations.

The Title I teachers and diagnosticians interviewd (informally) regarded the program favorably stating that it enabled them to zero in on specific reading problems and teach to them. Many have expressed concern, however, over the lack of comprehension skills. They feel that these skills are neither built into the program nor achievable within the present design. Many expressed the hope that, if continued, comprehension be added to the program.

Paraprofessional's feelings toward the program ranged from positive to ambivalent to negative. Several internalized children failing Q-tests (post-tests) after three weeks instruction with them was indicative of their own shortcomings. They appeared to have unrealistic expectations.

Observations

Observations began February 1, 1974 and continued through the middle of May, 1974. Each Wisconsin Design program had been visited at least twice. Observations included those of small group instruction (5-9 students) with paraprofessionals and teachers as well as of individual sessions.

Most programs had completed P-test administration and had begun actual instruction by the first of December. Two schools (PS 137, 188) did not begin until January while one school had started its program in mid-October (PS 34). The average length of time was four months treatment per child before post-tests were administered in April.

Instruction was mostly drill in nature. In most groups observed the students worked on materials prepared by the Title I teacher or the paraprofessionals. In one school a choral reading lesson was observed. Another program had students involved in silent reading. One teacher used poetry to teach rhyming words. In short, the variety of instruction was dependent upon teacher creativity.

One of the strongest positive features of the design was the small group. Children seemed less inhibited and defensive about their reading problems. Occasionally word games were used as instructional tools. Children appeared to enjoy this diversion and learning was taking place.

Paraprofessionals, in general, need to be commended for doing work for which they have never been trained, i.e., teach. Student loads and responsibilities seemed like an unfair weight in light of the fact that several were observed making and teaching errors or peculiarities that they had acquired. Since many taught in a separate room from the Title I teacher, it was virtually impossible to keep abreast of all the errors.

In later observations, after the post-testing had been done, many of the slower children had been siphoned off the bottom of original Title I teacher and paraprofessional loads. These students, working individually or in smaller groups than previously (2-4), were receiving additional diagnostic-prescriptive help. The rapport observed in these sessions was promising and results should follow if this relationship is maintained throughout the next year.

In the beginning of the evaluation, workshops between paraprofessionals and Title I teachers were observed. As the semester progressed these meetings declined as need diminished.

Summary and Recommendations

Summary

The most outstanding positive feature of the Wisconsin Design is that it isolates for the teacher those skills which are necessary for word attack. The small group affords the least embarrassing and most effective means through which to achieve instruction.

What was lacking in the program was, in large part, due to the measure of preplanning. Thus the fragmenting of instruction could be expected to produce little in overall gain on standardized tests. There was little transfer built into those programs seen. In addition, there was little standardization between the sixteen programs.

One of the strengths of the program lies in the fact that students got a lot of varied practice in taking tests. Unfortunately the demands are very different but the overall effect is perhaps positive. At least, Wisconsin pupils should be less test anxious.

Many teachers held fast to the idea of three weeks per skill. This seems counter productive in a highly individualized program in terms of its goals and objectives. Nevertheless, many cases of adherence were observed.

In those schools where the entire third through sixth grade was on the Wisconsin Design during phonics instruction, students appeared minimally concerned about being out of class. The best administration of the program would seem to be the one that lessens the student's anxiety over what he may be missing. It would be ideal to have phonics instruction as the concurrent classroom activity.

Recommendations

1. Establish a reading department in each school with separate instructional staff for grades 4-6.

2. Limit diagnostic-prescriptive instruction of this type to students in grades 4-6. Wisconsin seemed inappropriate for third graders.

3. Develop comprehension skills concurrently with word attack skills.

4. Use more content area reading materials to achieve the above instead of disconnected and unrelated readings that have little apparent interest or relevance for the student.

5. Assign a full-time coordinator in each school to the program to: (a) assume responsibility for maintaining resource files (b) train classroom teachers, (c) train paraprofessionals, (d) work with lowest level students, and (e) meet regularly with other Wisconsin coordinators from the other fifteen schools.

6. Encourage classroom teachers to individualized phonics instruction (using P-Tests results).

7. Departmentalize reading instruction by grade level.

8. Group students homogenously.

9. Develop tape libraries for para-professionals and students.

10. Provide adequate space for small group instruction.

11. Improve lines of communication between classroom teachers and Wisconsin coordinating teachers.

12. Give common preparation periods by grade to enable teachers to have Wisconsin workshops on a regular basis.

13. Support a summer workshop for teacher to develop materials for the program and for paraprofessionals to be trained.

KOTTMEYER PLUS FOUR BOOSTER PROGRAM

Program Description

Sites

The Kottmeyer Program was in effect in the four junior high schools in District One (JHS 22, 56, 60, and 71).

Staffing

At each of the following schools three teachers were originally assigned to implement the program: JHS 22, 56, and 71. At JHS 60, four teachers, under the supervision of two administrators, implemented the program. In addition, para-professionals/educational assistants were in attendance at all four school and assisted the teachers. Additional staff were added to the junior high school program subsequent to the April administration of the Metropolitan Tests.

Materials

The Kottmeyer Plus Four Booster Program consists of a complete package of material designed to teach word attack through phonics. Included in the software are workbooks which present word families followed by exercises, games, and pictorial exercises; a spelling workbook; reading cards and wheel based on words the student had mastered. In addition, a library of paperback novels accompanies the program. In short, there is a wealth of material that comes with the package.

Student Population

Students were programmed to use Kottmeyer based upon their scores on the Metropolitan Achievement Test. Those who received scores two or more years below grade level were placed in reading classes that were to receive Kottmeyer instruction. Thus, the number of students in the program at the junior high school level was approximately eight hundred.

Curriculum

The amount of time target students met with the teachers implementing the program varied from two to five periods per week. Actual utilization of the program within each class period was another area wherein much variation occurred. Although the author suggests that the program be used extensively for the first few weeks of the semester (one half to one full day), few teachers actually used the materials extensively. Some did use the program to form the nucleus of each reading lesson. However, in many cases Kottmeyer was used once or twice a week as a supplement to teacher formulated lessons.

The role of the paraprofessional /educational assistant in the curriculum was somewhat limited. Generally, the paraprofessional /educational assistant assisted the teacher in checking students' work and helped to answer questions students had about procedure. The rapport between students and educational assistants appeared to be quite good.

Procedure

Achievement

Kottmeyer was to have been utilized by the eighth and ninth grade target population in all four junior high schools. Because programs designed for the 7th grade never arrived JHS 22 used Kottmeyer in the 7th and 9th grades. JHS 56 used the program only on the 7th grade. JHS's 60 and 71 implemented it on the 8th and 9th grades as originally specified. Implementation dates varied somewhat as JHS 22 began on or about 12/1/73 and JHS 56 began February 1, 1974. Thus, grades and time of implementation vary between schools.

At the time of the April post-tests, Metropolitan Math, the maximum exposure any target child had to Kottmeyer was a little in excess of three months. Thus, evaluation for the program is difficult in that the time to effect significant change was too short. Eight months had elapsed between pre-testing and program intervention. Test results, then, must be weighed in light of these variables.

Using a real versus anticipated gain design, a correlated "t" test was employed to test the null hypothesis which was set at the previous rate of achievement gain. Significance was set at the P = .05 level.

Interviews

It was possible to gain some insight about teacher reaction to the program through informal interviews. Generally, their reactions ranged from very negative to ambivalence. There only seemed to be one teacher whose reaction was enthusiastic.

One of the most frequently given criticisms of the program was its infantile interest level. Many teachers expressed the belief that the program insulted the maturity of their students, who reacted to the insult by either refusing to do the work or by treating the entire reading session as a joke. Hence Kottmeyer seems only to "boost" discipline problems.

Another criticism given was the lack of mastery evaluation built into the program. Teachers also felt the lack of homework assignments to be crucial. The monotony of the program was also given as a major weakness. Students quickly became bored with the lessons and offered much resistance to doing the same, or similar activities for more than one day.

Finally, the bulkiness of Kottmeyer was another negative factor which teachers expressed. Although most teachers interviewed had several criticism of the program, all agreed that the possibility for complete individualization afforded by Kottmeyer was one which they welcomed theoretically. The idea of self-pacing was a favorable one to them. However, they expressed the belief that given the size and the heterogeneity of the classes, it was difficult to implement the program.

Each of the thirteen target teachers were observed at least four times and in different classes. Factors under consideration during these observations included: (1) student interest, participation, and development in the program; (2) teacher's command of the presentation of material; (3) appropriateness and success of the materials and curriculum; and (4) role of the paraprofessionals/educational assistant.

The general findings from observations were that students were not interested in or stimulated by the program. Rather, most students seemed, at best indifferent to it. Many were quite antagonistic toward it, occasionally offering comments like, "I'm not doing this stuff." Student class participation was extremely low during those classes observed. Again, this seems attributable to the inappropriate interest level of the *Kottmeyer Plus Four*. Student mastery of previous skills often seemed quite uncertain.

Most of the teachers observed used the *Code Book* and *Dr. Spello*, and had finished a substantial portion of each. Very few of them, however, used the reading cards or wheels, explaining that the students found these to be infantile, boring, and/or highly amusing. Many of the teachers attempted to incorporate the use of the cassettes into the curriculum but these, too, were met with derision from the students. Hence, the curriculum consisted, for the most part, of the use of the *Code Book* and *Dr. Spello*. Again, the actual amount of time spent during each session varied from one-fourth to the entire period.

In a student-centered program such as Kottmeyer, the role of the teacher is not directive. However, due to a lack of teacher flexibility, little imaginative implementation of the program was observed. The most interesting lessons observed were those in which the program was used in a supplementary way.

Summary and Recommendations

Summa[illegible]

Although the selection of the Kottmeyer Program seemed inappropriate for the junior high school pupil in terms of interest level, it did isolate and teach various skills that the students needed. The question becomes, given the expense of the program is it worth the price? From the evidence seen during this evaluation, the answer seems negative.

A good portion of this researcher's reaction to the program is based on the fact that so much of the materials aside from the *Code Book* and *Dr. Spello* went unused. The reason for this was based on reluctance to meet with derision from students because of the inappropriateness of the materials.

The materials are geared toward the right population only in terms of vocabulary items and difficulty (readiability) level. Interest level was most unmatched. (Examples of comprehension items include: "Will a big fat pig fit into a milk can?" or, "Are any fat twins slim?")

There was also a paucity of meaningful mastery evaluations built into the program requiring strong compensation on the part of the teachers.

The program also does not allow for the most effective use of para-profesionals/educational assistants. This limit is due to the structure of the program. In observations it was seen that rapport between students and para-professionals was quite good. A good program might take advantage of this relationship. Kottmeyer does not.

If a package is used in the future it should be attractive enough to keep students involved in task. Perhaps students did not feel enough challenge from the materials and that is why so many discipline problems and problems with class management were observed. Overall, the program does not seem to be geared to the needs of the student population that used it. Any transfer problems that the student may be encountering in his content area classes are not being dealt with through the Kottmeyer Program.

In defense of the reading teachers implementing the program, it must be recognized that great effort on the part of the district was exercised in attempting to standardize and monitor instruction at the junior high school level. This factor might be further analyzed to test its contribution in the servicing of the target population.

Much credit should be given to the teaching staff, both Title I teachers and paraprofessionals /educational assistants. While most had no training in reading and no experience in the teaching of reading, many sought interesting methods and techniques to add to the Kottmeyer program.

Another factor not to be ignored is the effect of reduced class size. Certainly students with mild to severe reading disabilities require as much individual attention as can be paid. At the same time, however, the effect of intermittent group work should not be overlooked or underestimated. The Kottmeyer program had little to offer the student in the way of group interaction-- since its total design was based on allowing each student to work at his own pace.

Another consideration in setting up a reading program at the junior high school level ought to address itself to the question of physical location. The teachers implementing the program operated at a disadvantage because they had to transport materials all over their respective schools. A reading room needs to be in a fixed place, preferably with display materials to invite the student to want to read and to subtly influence his attitude toward reading. The sight of a teacher wheeling materials and books in and out of the room in a shopping cart makes a strong statement to the child about the importance of reading instruction and its place in the curriculum.

Finally, research suggests that reading in the upper elementary through senior high school years must be taught in relation to the content areas. Programs with strong transfer modules are appropriate, even for students with retarded skills in reading. That the students' inability to decipher meaning from visual symbols on a page is not to say that their ability to handle ideas and concepts is also retarded. The instruction, then, must be meaningful to the student and must not be perceived as an isolated chore.

Recommendations

1. Establish a reading department or skills center at each junior high school to be headed by a teacher with some expertise in reading.

2. Establish a pilot group of those students at the desired reading level and institute a program of reading instruction to that group. In hind sight it was unwise to include such a large number of the target population in an "experimental" package. On the basis of the pilot group's achievement, extend the program throughout the population (or abandon it).

3. Continue small classes (not more than 12-15 students) for reading instruction.

4. Give reading teachers assistants who can be freed from other responsibilities enabling them to plan programs for students together.

5. Give reading teachers common preparation periods which would allow them to meet in workshops, to compile resource materials, and to plan remediation prescriptions.

6. Equip a reading center in each school with tapes, language masters, small libraries, and tutors. This would afford students the opportunity of seeking additional help throughout the day.

7. Increase the number of reading classes to a minimum of five (5) per week for those students who are two or more years behind.

8. Commit personnel and monies to the junior high school proportionate to the disbursement at the elementary level.

9. Establish yearly goals and follow through with some accountability device for their attainment.

10. Regard the students interest level and general sophistication before selecting materials.

BRL - DISTAR RESULTS

An analysis of covariance indicates that the BRL program, in every case at the kindergarten level, lead to readiness scores which were significantly higher than did the Distar program.

TABLE 1
KINDERGARTEN

Skill	Pre-Test BRL Mean	Pre-Test BRL S.D.	Pre-Test DISTAR Mean	Pre-Test DISTAR S.D.	Post-Test BRL Mean	Post-Test BRL S.D.	Post-Test DISTAR Mean	Post-Test DISTAR S.D.	f	t BRL	t Dis.	Signified
#1 Word Meaning	6.93	2.96	5.78	2.61	8.51	3.36	6.86	2.09	9.38	0.44	0.37	.001
#2 Listening	7.72	3.13	7.06	2.55	9.01	3.32	7.94	3.02	3.82	0.33	0.27	.05
#3 Matching	5.30	3.32	4.41	2.73	9.39	2.87	7.59	3.48	11.68	1.30	1.00	.001
#4 Alphabet	6.83	5.20	7.24	4.99	13.76	4.07	10.60	4.42	43.29	1.49	0.72	.001

The simplest explanation of the above results is that the BRL program is superior. A more reasonable explanation is perhaps the coorelation between the tasks on BRL assignments and the Metropolitan Readiness Test. BRL students did more writing from the onset of the program than did Distar students. The Metropolitan test is more oriented toward those with reading-writing experiences than those with the aural-oral experiences utilized by Distar. BRL makes students more familiar with the very things they will be tested on. Thus the instructional mode is consistent with the testing mode at the kindergarten level. This difference disappeared at the first and second grade levels.

While differences between BRL and Distar were found it is important to ask the meaningfulness of these differences. In three of four cases, word meaning, listening and matching, the Distar students fell into the ceiling of 'low normal' category while BRL students are at the bottom of the very next category ("average").

Review of the results above fails to find significant trends between pre and post tests of either program, though growth ocdur in both.

TABLE 2
Letter Ratings of Readiness Status

LETTER RATING	READINESS STATUS	TEST 1 Word Meaning	2 Listening Form A	3 Listening Form B	4 Matching	Alphabet
A	Superior	14-16	13-16	14-16	14	16
B	High Normal	11-13	11-12	12-13	11-13	13-15
C	Average	8-10	8-10	9-11	6-10	7-12
D	Low Normal	4-7	5-7	5-8	1-5	3-6
E	Low	0-3	0-4	0-4	0	0-2

In terms of the knowledge of the alphabet, BRL students were much above Distar students. It must be remembered that BRL students began at higher levels than did Distar students in all areas except the alphabet. Therefore, the really impressive difference occured with the alphabet test. Since these students were not taken from their natural environment, however, it is impossible to determine whether the results obtained were due to either of these programs or to sundry other factors. It may be that Sesame Street is most effective at improving scores on the alphabet component of this test, and less effective at gaining improvement in other areas.

An analysis of the low pre-test scores with their attendent large standard deviations indicates that much variation in readiness existed between students. The increase obtained in average scores in the four categories of both reading programs may have been due to very large gains of those students who were ready. If this is the case then we must ask whether either program should be attempted with those who are not yet ready to begin reading instruction. However, when the children were ready for a reading program, as the first and second graders were, they seemed to have benefited equally from the BRL and Distar programs.

An inspection of the data presented in Table 3 reveals that students gained in terms of vocabular, comprehension, and total reading scores between pre and post tests. However, an analysis of covariance revealed that there was no significant difference between those in the BRL program and those in the Distar program.

TABLE 3
Reading Achievement Grade
Grades 1-2

	Pre-				Post						Sig. Level
	BRL		DISTAR		BRL		DISTAR		BRL	DIS.	f
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.	$\bar{X}$	S.D.			n.s.
Vocabulary	1.62	0.62	1.54	0.40	2.22	1.07	1.99	0.70	0.87	0.83	n.s.
Compre.	1.62	0.52	1.55	0.39	2.01	0.76	1.95	0.68	0.59	0.68	n.s.
Total Reading	1.62	0.55	1.55	0.34	2.11	0.82	1.98	0.60	0.82	0.75	n.s.

Since there was no way to control for normal maturation we do not know whether these gains would have resulted in the absence of these programs. The "t" test results show that neither program had a significant effect on the students.

A more detailed analysis would have been possible had the first and second grade scores not been combined. With the average first and second grade pre - test score totaling 1.62 and 1.5 it appears that these students were near normal readers at the onset of the program. Discarding hundreds of nontestable students scores in the N also served to give higher group means than would have been the case had they been included.

A question of further interest would be the long term effect of the program beyond the second grade. At these grade levels six to seven months of reading growth. At the higher grade levels each month of schooling produces progressively less growth. When the level of retardation in reading remains constant.

WISCONSIN RESULTS:

The results of the Wisconsin reading program administered to students in grades three through six reveal that in three of these grade levels the program succeeded in improving post test reading scores over anticipated post test scores. Table 1 presents these results.

TABLE 1
MAT Reading Achievement by Grade

GRADE	N	PRE		ANTICIPATED		POST		t	Sig. level
		X	S.D.	X	S.D.	X	S.D.		
3	244	1.72	0.31	2.15	0.49	2.24	0.43	2.75	P .01
4	290	2.07	0.38	2.46	0.52	2.56	0.54	3.01	P .005
5	309	2.47	0.46	2.86	0.57	2.85	0.72	0.42	P is n.s.
6	416	2.97	0.57	3.39	0.69	3.59	1.01	512	P .001

This analysis is based on the comparison of total anticipated post test scores with total actual post test scores and assumes that the computation of the anticipated post test is valid. However, a close inspection of Table 1 suggests that there may be a problem in the validity of the anticipated post test score. That is, in one case, the anticipated post test score in a given grade is higher than the actual pre-test for the next grade. In the third grade the average anticipated post test score of students near the end of the term is 2.15. This is higher than the pre test scores for a similar group of fourth grade students who obtained an average of only 2.07 several months later in life. In other possible comparisons, fourth grade APT with fifth grade pre, and fifth grade APT with sixth grade pre, the pre-test are greater but only fractionally.

An analysis by grade shows that the Wisconsin program made its largest contribution to improvement in scores in the area of vocabulary. By comparing pre and post scores on subtests of the Metropolitan it can be seen that greater gains were made in vocabulary in grades three and four. No significant gains were made in the fifth grade, and students in the sixth grade improved both in the area of vocabulary and in reading comprehension.

TABLE 2
Grade and Grade Averages on Pre and Post

		Pre		Post			Pre		Post	
3rd.		$\overline{X}$	S.D.	$\overline{X}$	S.D.	5th.	$\overline{X}$	S.D.	$\overline{X}$	S.D.
	v.	1.73	0.36	2.32	0.46		2.52	0.54	2.90	0.74
	c.	1.70	0.35	2.15	0.51		2.45	0.54	2.93	0.85
	t.	1.72	0.31	2.24	0.43		2.47	0.46	2.85	0.72
4th						6th.				
	v.	2.10	0.40	2.67	0.50		3.04	0.65	3.61	1.10
	c.	2.03	0.45	0.47	0.59		2.99	0.67	3.72	1.14
	t.	2.07	0.38	2.56	0.54		2.97	0.57	3.59	1.01

Factors which might account for little or no significant gains in the area of comprehension might stem from a general lack of emphasis on that skill. That is, the program's design is to teach decoding skills in isolation. There was little or no attempt to develop comprehension skills in conjunction with decoding skills.

Further analysis of the anticipated test scores and the actual post test scores reveal that program intervention made little or no difference between how students might have done had no special instruction been given. In all cases where the actual post test was higher than had been anticipated, the difference was significant beyond the .05 level of probability. However, while statistically significant, these differences were by and large rather small. The amount of difference ranged from -.01 to .20.

TABLE 3
Gains by Grade Over APT

GRADE	$\overline{X}$	S.D.	t	P
3	.09	.45	2.75	.01
4	.10	.53	3.01	.005
5	-.01	.65	.42	n.s.
6	.20	.85	5.12	.001

The above scores represent the difference between anticipated and actual post test scores. Thus, the program has had a positive effect on reading scores in terms of the comparison. The question which must be answered by those in a policy making role is, given the small though significant, are the costs of this program justified? Additionally, an issue which must be considered but cannot be dealt with in terms of the present data is an evaluation of the program in terms of the way in which cleaning takes place, the interaction of paraprofessionals with students and the effects thereof, and other results of the program which cannot be measured by reading tests.

KOTTMEYER RESULTS

The results of the Kottmeyer Reading Program administered to students in grades seven through nine reveal that in all cases the program succeeded in improving post test reading scores over anticipated post test scores. Table 1 presents these results.

TABLE 1
TOTAL READING SCORES BY GRADE

		Pre-test		Anticipated		Post-test		
GRADE	N	X	S.D.	X	S.D.	X	S.D.	t
7	87	3.88	1.03	4.38	1.21	4.69	1.17	2.01
8	206	3.92	0.95	4.33	1.13	4.63	1.22	4.12
9	131	3.90	1.11	4.27	1.26	5.18	1.69	8.24
TOTAL 7,8,9	424	3.90	1.02	4.32	1.19	4.81	1.39	8.20

This analysis is based on the comparison of total anticipated test scores with actual post test scores and assumes that the computation of the anticipated post test is valid.

A grade by grade analysis of pre and post scores indicate that gains were made in both the area of vocabulary and comprehension.

TABLE 2
GRADE BY GRADE PRE & POST

	PRE		POST			PRE		POST	
	Mean	S.D.	Mean	S.D.		Mean	S.D.	Mean	S.D.
7th					9th				
Vocabulary	3.87	1.08	4.98	1.56	Vocabulary	3.86	1.11	5.47	2.01
Comprehension	3.93	1.16	4.51	1.18	Comprehension	3.99	1.24	4.96	1.54
Total	3.88	1.03	4.69	1.17	Total	3.90	1.11	5.18	1.69
8th					Total				
Vocabulary	3.95	1.01	4.74	1.56	Vocabulary	3.91	1.05	5.01	1.74
Comprehension	3.95	1.04	4.64	1.18	Comprehension	3.96	1.13	4.71	1.31
Total	3.92	0.95	4.63	1.22	Total	3.90	1.02	4.81	1.39

An analysis of the junior high school curriculum may indicate sources of these improvements in reading. Observations and interviews revealed that the Code Book and Dr. Spello were the major portions of the program in use. Wherein these sources might serve to improve vocabulary, it is doubtful that either would significantly increase comprehension scores.

Finally, an analysis of overall gain, indicates that though gains were significant they were small.

TABLE 3

	Mean	S.D.	"t"	Significant level
7th	.30	1.19	2.01	.05
8th	.30	1.17	4.12	.001
9th	.91	1.47	8.24	.001

Only the ninth grade students made a marked improvement in actual post test score over anticipated post test score. While the program and or sundry other factors did have a positive effect on reading scores the question to be answered is, are the costs of the Kottmeyer Four Plus Booster Program justified? Was it the Kottmeyer program that lead to these gains or was it other elements of the junior high school experience?

A final consideration is that the junior high schools tailored the reading program to these students specific needs. There was coordination in each junior high school and among all four schools. Reading classes were reduced and individual attention was paid to target students. Therefore, in evaluating the program one must isolate further the effects of the junior high school curriculum on the student.

ELEMENTARY BILINGUAL-BICULTURAL PROGRAM WITH TITLE VII

Program Description

Introduction

The Bilingual-Bicultural Program has completed its third year of operation, making it the longest running Bilingual program in District I, Manhattan. It was funded jointly by Title I and Title VII for the purpose of teaching children in their dominant language while providing instruction in the second language. The program also served the district as a resource and demonstration model. The cultural component was a most integral part of the program so that children received instruction and exposure to Puerto Rican and Hispanic Culture. Thus Spanish dominant children acquired academic skills in Spanish and learned English as a second language, while English dominant children acquired academic skills in English and learned Spanish as a second language. The stated goal of the program was that participants would reach complete bilingual competency so that both first and second languages could be used as a vehicle for academic instruction in all content areas.

Sites

The program plan was approved on September 6, 1973, and was authorized on October 9, 1973. The operational date of the program was September 10, 1974. The program was located in three District schools, PS 20, PS 63, and PS 134. These were the schools that have housed the program in previous years. The physical plant for children participating in the program was not reported as different from that offered non-program children in the District or in the host schools. Each school housed the five classes which made up the bilingual mini-school with a class in each grade from kindergarten to the fourth grade.

Staffing

Lines of authority for the program ran from the community school superintendent, through the Title I coordinator to the bilingual-bicultural coordinator. The duties of the bilingual-bicultural coordinator were defined as follows:

1. Providing the administrative oversight for the program.
2. Providing a liaison with the host schools.
3. Preparing and training teachers, educational aides and other support personnel.
4. Continual evaluation of program output and program planning.
5. The supervision of the supervisory assistant and the teacher-trainer.

The coordinator was assisted in program duties by a teacher-trainer whose duties were to:

1. Conduct regularly scheduled workshops for teachers and assistants.

2. Develop curriculum study units for particular program needs.
3. Visit classroom teachers for observation and conference sessions.

During previous summer intersessions, the coordinator had been assisted by two staff assistants whose duties were the:

1. Creation of Puerto Rican culture units for the newest grade level added to the program.
2. Development of strategies for teaching Spanish.

In previous years there has been an English language coordinator to train the program's ESL teachers, evaluate the oral English program, and develop means of diagnosing and measuring English language competence. During the past year, both of these positions remained unfilled and those duties described above could not be adequately supervised by other administrative personnel.

There was a supervisory assistant position that is funded by tax levy funds. This person assisted the coordinator in administering and integrating the components of the program.

The program had 15 regular classroom teachers, three ESL teachers and three cluster teachers. Thus, each of the three schools had five regular classroom teachers, a cluster teacher, a relief teacher who had an area of specialization, and one ESL teacher. Three teacher assistants were also part of the staff component. They provided supportive instructional services within bilingual classes.

To help with the educational duties, Teacher Corps interns from Hunter College participated in the program. The interns were at PS 134. They had their own director who supervised their involvement and coordinated intern activities with those of the program.

All the teachers held regular Bilingual Common Branches or Bilingual Early Childhood licenses. Many of the teachers had graduate credits and some held Masters degrees. The program provided tuition payment for courses at Hunter College for a Masters in Bilingual Education and some teachers had enrolled in the Hunter College program.

There were two family workers in the program who worked through the bilingual office so that they could serve the three schools more efficiently. These workers provided services to program parents through home visits and school workshops.

Materials

Since the program had predated all other Bilingual programs in the District there was a diversity of materials used, adapted or simplified for use within the program. These materials served two purposes: they were used as the program's content as well as serving as demonstration models for curriculum development. Materials used included the IPI Math program. The Spanish reading readiness program was Preparandose A Leer, Spanish basal readers were the Laidlaw reading series. The Houghton Mifflin reading readiness program was used in English.

English language reading series in use in the host schools were also incorporated as program materials. In addition, "Hablan Los Ninos" tapes by National Text Books and other audio-visual materials were used. Since extensive research into materials had been made along with adaptation of other materials, it appeared that the general consensus was not for further development but rather for refinement in the use of materials. Thus, emphasis could be shifted from information gathering to more effective use of materials available to the program.

Student Population

The program serviced 350 pupils. About 70% of the students were Spanish dominant and 30% English dominant. This breakdown roughly represented the District's proportion of Hispanic background to non-Hispanic background pupils. The proportion of Spanish to English dominant children in the various classrooms varied just as that proportion varied from school to school. Of the English dominant children selected, some had Spanish surnames. There were children in grades 1, 2, 3 and 4 who had continued from the preceding year(s) so that continuity was maintained within each "mini-school" program. Children were selected for program participation on the basis of parental consent. The children were then assessed to determine language dominance.

Curriculum

The program curriculum reflected the New York City curriculum for grades K - 4 However, instruction was given in these content areas in both Spanish and English. Program components were basic reading in the first language, instruction in the second language, content area instruction in both the dominant and the second language, and a cultural program. Here basic reading was conducted in Spanish and English, second language instruction was provided in English for the Spanish dominant and Spanish as a second language instruction for the English dominant pupil. The Puerto Rican cultural component was presented to all pupils in the program as well as oral Spanish enrichment.

Puerto Rican culture had been defined to encompass all possible academic areas such that History, Geography, Art and Music were studied but also these areas were used as content constructs for reading and mathematics instruction.

Specific materials and acquisition strategies had been defined for the possible types of pupils participating in the program. The four types of students defined as possible program participants were:

a. the Spanish dominant

b. the English dominant of Spanish background

c. the English dominant of non-Spanish background

c. the language deficient child of Spanish background

The implementation of basic reading, second language learning, content areas in the first language and Puerto Rican culture had been expressly defined for each of the four participant descriptions.

Each class was linguistically mixed with children of all four language types described above.

The program taught the second language on a graduating scale. Kindergarten children were presented with 30 minutes of second language instruction - ESL or SSL - daily. First graders received one second language class of 30 minutes and one 45 minute content class daily in the second language. The content class consisted of an academic subject that was taught by the bilingual classroom teacher in the second language. The particular content area was decided by consensus. Those involved in the decision were the teacher trainer, program coordinator and the teacher. The teacher's competence and skill in a particular area was taken into consideration.

At the second grade level there was a 30 minute session in the second language plus two content classes each of 30 minutes duration in the second language. By the third grade, pupils had half of the academic work conducted in the second language. If the student was reading on grade level in his dominant language, he then began second language reading. The pattern established in the third grade continued unchanged in the fourth grade. As the program design was intended, this pattern would continue until the sixth grade.

PROCEDURE:

Achievement: Successful academic performance in specific skill areas-reading and math was defined as performance significantly better at the end than at the beginning. This level of skills attainment was tested and monitored by individual classroom teachers. To measure academic achievement in these areas both standardized and district made tests were used. The New York City Pre-Reading Assessment was administered to the Kindergarten classes. The first through fourth grade classes were assessed with the Inter-american series in reading. Pre-tests were administered in February and post-tests were administered at the end of May. Because tests were administered in close time proximity, scores could not reflect the magnitude of growth that could have taken place during a full academic year. Had pre-tests been administered at the beginning of the school year then the difference in scores could have reflected the change in abilities due to program input.

Mathematics achievement was measured with the IPT test that could be administered in either in English or Spanish. Pupils in each grade took the appropriate level math test . Items on the math test included such concept areas as number, set theory, mathematical operations and geometry. The mathematics tests were devised to assess various achievement levels, thus the kindergarten level assessed number, size, one to one correspondence, etc. level one assessed the same concept areas but also included addition, subtraction, etc., level two encompassed the areas described and included multiplication and division. Scores on level on range from 1 to 45 and on level 2 score values were from 1 to 60 thus a score indicated the extent to which concepts were being mastered on a scale of 1 to 60.

Interviews: Interviews are conducted on several occasions with both the program coordinator at the district office and with teachers in their class - rooms. The coordinator was interviewed before testing and classroom observations were begun in February, 1974. This initial interview provided the evaluators with background information about the program as well as an understanding of its philosophy. This interview provided the coordinator an opportunity to suggest areas of inquiry to be included in the observation. In March, 1974, the evaluator met with the program coordinator to discuss the interim evaluation. The coordinator was again consulted at the end of May, 1974 to discuss the final evaluation, and program directions.

Whenever classroom teachers were observed throughout the evaluation process, the evaluator conducted informal interviews with the teacher. Open ended questions were asked regarding materials used, the aims of classroom instruction and program intent. Teachers were encouraged to answer freely with the understanding that their responses would be kept confidential. Thus almost every teacher in the program was interviewed once and some teachers were interviewed twice. The results of these interviews will be discussed in the results section of this report.

Observations: Observations were conducted throughout the evaluation period from February, 1974 to June 15, 1974. Each class was observed on at least two separate occasions for a total of 50 to 75 minutes observation time per classroom. Each class was observed with its regular classroom-teacher on at least one occasion. Cluster and ESL teachers were observed with whole classes and with small groups of children.

Most lessons observed were of skill acquisition - i.e. reading, ESL and mathematics. Each observation session consisted of a 20 minute observation period and a 5 minute coding period. The purpose of the coding period was to record the content of the lesson, classroom linguistic composition (i.e. number of Spanish dominant and number of English dominant pupils), language usage, teaching style and material utilization. A copy of the observation instrument can be found in the Appendix of this report.

RESULTS

Achievement: Reading - Kindergarten pupils in the program were tested with the New York City Pre-reading Assessment. This instrument devised by the New York City Board of Education measures visual discrimination and picture vocabulary. The pupils were required to identify objects when spoken descriptions were given to them and they also had to identify similarities and differences in letters and words. The test assessed the pre-reading skills.

To assess the growth in skills for the three kindergarten classes in the program the pre-reading assessment test was administered in February and in May. The evaluator reminds the reader that the growth measured only represents a portion of the actual growth that had occured. Had the pre-tests been administered in the Fall, pre-test and post-test differences would have assessed the growth in readinesss skills which occured during the Kindergarten year. The table below shows the mean scores, and standard deviations of the Kindergarten sample as a combined group of 88 pupils. The two scores shown are for the language and visual discrimination sub-tests.

TABLE 1
ACHIEVEMENT OF READINESS BY KINDERGARTEN
(N=88)

Subtest		Pre-test		Post-test		
	N	Mean	S.D.	Mean	S.D.	t ratio
Language	88	23.76	4.48	27.28	4.21	8.54 **
Visual Discrimination	88	17.99	6.81	23.36	5.81	7.55 **

** P $\leq$.001

The kindergarten sample achievement improved that was statistically significant. There is a difference in sub-test scores at the initial administration of evidenced by the lag in visual discrimination compared to language. These may be due to lack of maturation or exposure to this skill. However, post-test scores demonstrate that there was growth as well as narrowing of difference between assessed indicating that along with perceptual maturation there was consistent exposure to activities and instruction to foster these skills.
If the sub-test scores are combined the mean pre-test score would be 41.74 and the mean post-test score would be 50,64, both scores approach the above average ratings as defined by the interpretive rating scale supplied byth e test publishers. Such scores indicate that most of the students will be able to enter a program of systematic reading instruction when they enter the first grade.

FIRST GRADE: The Interamerican Series of reading tests was used to assess progress in reading for the pupils in the first, second, third, and fourth grades. The series provided English and Spanish test versions for appropriate grade level from 1-12. The test description provided by the publisher states that the tests provide measures of ability and achievement in language. This test has both Spanish and English versions that are presumably equivalent because the content used is as nearly identical as possible without translating cultural bias from one version to the other. Each test contains vocabulary and comprehension subtests. Table 2 represents the results of the testing of first grade pupils on the Spanish version of the Interamerican Reading Test.

TABLE 2
READING ACHIEVEMENT IN SPANISH: GRADE ONE

		Pre-test		Post-test		
	N	Mean	S.D.	Mean	S.D.	t ratio
Vocabulary	40	17.22	11.98	23.20	12.48	3.86 *
Comprehension	37	13.73	11.94	18.03	11.30	4.16 *
Total	40	22.92	23.29	40.10	22.39	4.41 *

* $p \leq .01$

The gain measured in both subtests and in the combined test score are statistically significant, indicating that the improvement was substantial. Upon examining standard deviation values their magnitude indicate that there was great variability among socres. This variability indicates that some pupils performed very well, and some performed very poorly. However, the overall gain in reading scores is substantial for the group. When compared with the mean test score for the first grade sample in the previous year these results appear to be more favorable. Pre-tests were not administered at the same time during the school year so that only post-test scores can be compared. The mean post-test score in 1973 was 32.9 with a standard deviation of 20.3. The mean post-test score in 1974 was 40.10 with a standard deviation of 22.39. These score differences indicate overall program performance in grade one has been maintained if not also improved. This improvement is somewhat biased by the fact that some students were in the program last year.

Interpretative information on the tests provided in the publishers Technical Manual is not a helpful source of normative data by which to compare pupil growth. Both the Spanish and English version of the test were standardized on Children Speaking only one language. Thus normative data from single language pupils in Puerto Rico has limited use in the interpretation of sample scores from bilingual or potentially bilingual pupils.

Although test data cannot be used to make inferences about language learning strategies, the single language pupils have a common language code by which to arrive at word meaning and concept understanding. The bilingual child is exposed to more than one language, and is presumed to utilize a difficulty arranged corrective structure. Thus while decoding is done by the single child in one language, this difficulty caused by diversity is repeated to increase with age. The older child should have a more difficult task in becoming bilingual than the younger child. Additionally the bilingual child may be involved in a language learning process that involved mediation strategies not yet understood. Since the Interamerican series was not created with the specific intent of evaluating the achievement of bilingual pupils or cognitive functioning, the construction style of test items may not have taken the possible cognitive style of the bilingual into account. Therefore specific items or choices w-thin test items may be distractors that cause bilinguals to apply strategies of translation or other cognitive difference from the behavior in the environmental context. Thus the elicited response would be scored as an incorrect response perhaps causing the score of a bilingual child not to reflect his true reading ability. Evaluation of test results of bilinguals must take into account the existence of specific language behaviors and cognitive styles that may influence test performance even in the first language.

SECOND GRADE: Most second grade pupils were tested with the Spanish version of the Interamerican Series, there were some pupils who were tested on the English version. The results for grade 2 testing are presented in Table 3 for the Spanish sample and on table 4 for the English sample.

TABLE 3
READING ACHIEVEMENT IN SPANISH
(N=25)

	N	Pre-tdst Mean	Pre-tdst S.D.	Post-test Mean	Post-test S.D.	t ratio
Vocabulary	19	27.05	12.05	34.26	7.08	3.35 *
Comprehension	20	20.50	13.16	24.30	12.30	3.26 *
TOTAL	20	46.75	24.70	56.80	21.28	3.21 *

* P ≤

All score gains are statistically significant. An examination of the data indicates that there was great variability among scores. At this grade level pupils are being exposed to more English yet they are able to maintain a high degree of competency in Spanish reading skills.

Test scores for this sample can be interpreted, again with some caution, in light of score obtained from the Bureau of Educational Research (Data and Sample Size unknown) on a sample of New York City Spanish speaking pupils. When compared to this group the pretest scores fall above the 80th percentile. According to those data the pupils in the program are performing at a higher level than the Spanish speaking research sample. Here one must consider that the comparison between these groups may be of limited value sine the language of instruction nor the educational exposure (i.e., New York City educated or recent arrivals that were educated in Puerto Rico) of the norming sample are known.

If the second grade sample were compared to the second grade sample of the previous year, the degree of program consistency or variability could be determined. Since the time of the pretest administration differed between the two second grade samples these scores will not be taken into account in the comparison. Post tests were administered at the end of the school year for both groups, therefore these scores are comparable. Mean posttest scores for the second grade sample in 1973 was 440 with a standard deviation of 20.7 and the mean post-test score for the 1974 second grade sampl,e was 56.80 with a standard deviation 21.28. The data indicate that the variability in test performance for both samples is of similar magnitude. The mean score for the 1974 sample is grater than that of the 1973 sample demonstrating stability in program insturction but also indicating a tendency toward improvement.

TABLE 4
READING ACHIEVEMENT IN ENGLISH: GRADE TWO
(N=8)

	N	Pre-test		Post-test		
		Mean	S.d.	Mean	S.D.	t ratio
Voacbulary	8	23.12	9.00	23.88	10.80	0.49 n.s.
Comprehension	8	19.38	9.50	18.50	10.43	0.47 n.s.
TOTAL	8	38.75	21.77	42.38	20.00	1.09 n.s.

There is no statistically significant difference in scores. With such a small sample of students the evaluator is not able to make reliable inferences about the effectiveness of a program component. The time between test taking must also be considered, had pretest been administered at the beginning of the academic year gain in scores may have showed reading improvement. Scores on other English reading tests were not available so that conclusive remarks about English reading achievement are not in order at thistime.

THIRD GRADE: Pupils in the third grade were tested with either the Spanish or English version of the Interamerican test. The results are contained on Table 5.

TABLE 5
READING ACHIEVEMENT IN SPANISH AND ENGLISH: GRADE 3
(N=34)

	N	Pre-test		Post-test		
		Mean	S.D.	Maan	S.D.	t ratio
Spanish Reading	15	39.47	21.50	54.07	22.76	3.16 **
English Reading	19	67.05	14.82	70.79	16.44	2.01 ** n.s

** = $P \leq .01$,

The data indicates that substantial improvement was made in reading achievement for the Spanish reading sample such that gains were statistically significant. The mean post-test score in the Spanish reading sample was roughly equivalent to the 55th percentile of all students tested in the third grade at all schools in Puerto Rico, in March, 1967.[1] Although a comparison of performance of these two examples must be considered within the limitations explained in the discussion of the first grade results, program third grade participants can be considered to be as competent in their Spanish reading ability as their Puerto Rico counterparts. Comparison with the 1973 third grade sample (post-test means 54.4, S.D. 18.8) indicates that reading skills have been maintained at about the same level.

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[1] Manual - Tests of General Ability and Test of Reading, Interamerican Series Forms CE and DE, CE's and DEs, Herschel T. Manual, Guidance Ass. pp. 55 Table 49.

Had the pre-test been administered earlier gain scores may have proven to be significant. Standard deviation values for this sample show that there was less variability in scores than for the Spanish reading sample. Also both pre-test and post-test scores for the English reading sample are higher than those for the Spanish reading sample indicating that the English reading group is performing at a higher level of reading proficiency. When sample scores are interpreted in light of the results obtained on a third grade English speaking sample tested by the Bureau of Educational Research both pre-test and post-test score fall above the 55th percentile of the norming group. Thus it can be concluded that the English reading sample is more advanced in reading ability than their norming group. Program participants compare more favorable than (their norming group counterparts) students in schools with both Spanish and English speakers not in bilingual programs. A comparison with the 1973 third grade sample was not made because the data available did not distinguish between Spanish reading and English reading scores.

FOURTH GRADE: Fourth grade pupils participating in the program were tested with either the Spanish or English version of the Interamerican test. Table 6 contains the results.

TABLE 6
READING ACHIEVEMENT IN SPANISH AND ENGLISH: GRADE 4
(N=11)

	N	Pre-test		Post-test		
		Mean	S.D.	Mean	S.D.	"T" ratio
Spanish Reading	7	54.47	21.42	72.71	15.40	4.72 **
English Reading	4	26.75	8.54	46.00	4.32	6.34 **

** $P \leq .01$

The results indicate significant gains for both reading groups. The scores for the Spanish reading sample are greater than the scores for the English reading sample, however the range of variability indicates that actual scores for the English reading group clustered close to the mean, thus the mean value gives a better representation of actual performance for the group. Conclusions however, are in view of the small number of subjects both pre and post tested.

Mathematics: IPI mathematics tests, were administered in February and in May. Table 7 contains the results for first, second, third and fourth grade classes.

TABLE 7
MATHEMATICS ACHIEVEMENT BY GRADE

GRADE	N	Pre-test Mean	Pre-test S.D.	Post-test Mean	Post-test S.D.	"t" ratio
1	24	10.83	6.38	25.04	9.66	9.60 **
2	23	21.09	6.42	27.52	5.57	5.72 **
3	14	28.93	5.70	29.71	6.63	0.41 n.s.
4	13	32.31	2.14	34.85	1.40	8.72 **
TOTAL	74	21.22	10.03	28.42	7.65	7.81 **

** $P \leq .001$

Math gain scores for all samples except grade three show statistically significant improvement. These gains indicate that substantial progress was made in mathematics ability for grades 1,2, and 4. Grade 3 classes made no appreciable gain in math ability.

Interviews: Informal discussions with individual teachers revealed certain important aspects of their understanding of the program. The interviews showed that all teachers understood the concept of bilingual-bicultural education. They were able to define how the program would implement bilingual-bicultural education by describing program goals and citing specific curriculum content to implement these goals. Most teachers were able to describe how the bicultural component of the program would be implemented although some had difficulty describing its direct incorporation into all skill and content areas. They had knowledge of language development and langauge teaching. Although there was great knowledge of published curriculum materials the teachers had limited knowledge of audio-visual equipment, its availability or its use.

Observations: Classroom observations were used to compile information regarding the physical setting, material utilization, program content and language usage of participants in the program. All classrooms were brightly decorated displaying children's work and they were organized so that specific activity areas were defined.

BILINGUAL-BICULTURAL

A variety of text books and library books were in evidence in all classes. Few manipulative materials were in evidence in any classroom beyond kindergarten and the only audio-visual equipment in evidence were a few phonographs. Classroom displays indicated strong emphasis on reading, math and social studies, science displays or science work areas were in evidence. Most activities observed were organized such that whole class instruction or small group instruction were used by the teacher and other educational assistants. Adult-pupil and pupil-pupil tutorials were occasionally observed. Activities using cultural and bicultural content were observed in second language lessons (SSL and ESL) in reading lessons and in social studies lessons. Cultural and bi-cultural content are defined as events, customs or activites that draw upon the pupils' direct experiences, family practices and the historical and social background of the ethnic group and the mainstream culture. Student interest and participation was very high in those activities where observed was to have been incorporated. However, it was noted that at many other observation sessions the lesson topic could have been presented in this manner and was not. Language usage was consistent within contexts of lessons as well as written informal conversations. There was no evidence of language mixtures in teachers' usage. All teachers responded to pupils mixed sentences, spanicized or anglicized words by allowing the pupil to express his ideas and providing the appropriate term in her response. The pupil was never reprimanded or overtly corrected for his response but rather the teacher provided the appropriate alternative language model.

Summary

Students in the Kindergarten classes served by the Bilingual-Bicultural program have made good progress. Most students will be ready for formal reading instruction when they reach first grade.

Students in first, second, third and fourth grades have made substantial progress in their Spanish reading skills. Test performance indicates that Kindergarten through third grade classes were performing as well or better than last years participants. The first, second and fourth grade classes have made the most progress in reading.

In English reading ability third and fourth grade classes have made progress. A comparison of scores with a norming sample of non-bilingual program participants indicated that English reading third grade classes were superior to the norming group.

Mathematics achivement for grades one, two and four showed significant improvement.

Executive Summary

The Bilingual-Bicultural program was a program in its third year of operation. It taught spanish as a second language to english dominant children and english as a second language to spanish dominant children. Operating in three schools, it had five classes in each school, K-4.

Headed by a competent coordinator, the program had a teacher trainer, a full complement of bilingual teachers, educational assistants and family assistants.

Kindergarten classes were administered the New York City Pre-reading Assessment and found to have made significant improvement. Students in grades one through four were administered the Interamerican Reading Test in English or Spanish. Gains in Spanish reading achievement was found to be significant. English reading improvement was found to be significant for the third grade. Fourth grade English reading scores showed some gains. Second grade readers of English showed no improvement and careful examination of tests may indicate where problems lie. Since no data on other English reading tests were available for this group no other comparison were made about their reading achievement.

When compared to program participants of the previous year performance for each grade group was better in 1974 than in 1973. It is recommended that the program have a full tim- curriculum developer so that needed curriculum units will be ready for the new grades added to the program. It is stressed that the functions of this person include the incorporation of cultural materials into a revised and proposed curriculum the existing of teacher experience and expertise in the development of such materials and that the curriculum developer work with the teacher trainer in the implementation of pre-revised curriculum of such units. In view of the program's continued success, it is recommended that it be refunded.

APPENDIX A

Observation Schedule for Bilingual-Bicultural and Bilingual Classes

Date________________ Time __________________Duration of Observation_____

School____________________ Class____________Teacher____________________

Number of Students Present _____________________

Other Adults _________________ Title of other Adults__________________

I. Dominant language of students:
(Number)
English________________
Spanish________________

II. Classroom:
1. Classroom library: describe content________________________
language____________________________
2. Exhibits of Student work: describe content________________

3. Classroom exhibits: describe content_____________________

4. Describe manipulative materials and audio-visual equipment
____

5. Textbooks: (List)____

6. Describe materials dealing with Hispanic culture___________
____

7. Describe materials dealing with Anglo-American culture
____

III. Classroom organization - circle one(s) in each category.

1. whole class, groups, individualized, pupil-pupil or teacher-pupil tutorials.

2. one teacher, team teaching, teacher and other adults each with small group.

IV. Language of Instructional Content
1. subject or content area:_____________________________________

2. Describe language of: a) teacher or other adult__________
____
b) children_________________________
____

(Use: Spanish, English, Half Spanish-Half English,
Mixed sentences; alternation- translation of
each sentence, "Spanglish".)

V. Cultural and/or Bicultural Aspects of Lesson (circle appropriate ones)

a) Customs, Goods, social structure

b) Interpersonal behavior - gestures, verbal and non-verbal behavior.

VI. Interpersonal Aspects of Instructional Style

1. Teacher or other adult provide opportunity to answer questions and share experiences? Which?

2. Is there positive physical contact between teacher and individual pupils?

3. Does the teacher encourage the use of other adults as resource persons?

4. Does the teacher encourage the use of other children as resource persons?

5. Teacher regard for pupils
   a. Describe how the teacher responds to pupils initiating interaction.

   b. Describe how the teacher responds to pupil language mixture.

ELEMENTARY BILINGUAL PROGRAM

Program Description

Introduction

District I, Manhattan is a school district where about 70% of the school population is Spanish-speaking. Here also a great proportion of the pupils are described as having little or no fluency in English. Thus, great numbers of students had difficulty in following the school curriculum in English. The Elementary Bilingual Program was designed to afford Spanish-speaking pupils an early opportunity to experience academic success and thereby develop a positive self concept. The program was designed to provide instruction in reading, mathematics and other basic skills while pupils learned the second language. The overall goal was to foster conceptual development thus providing academic success while the second language was being acquired.

Sites

The program was approved September 6, 1973, and it was given authorization on October 9, 1973. The operational date was September 10, 1974. The program functioned in elementary schools in the district located at PS 15, PS 34, PS 64, PS 110, PS 160 and PS 188. The physical plant of the classrooms where the program was housed was not reported as different from that offered non-program children in the District elementary schools or the host schools. The number of bilingual classrooms per school varied; that is the number of bilingual classrooms under the supervision of the assistant coordinator varied because of individual school need, staffing, and because Module 5 tax levy classes were included in two schools. Under the Module 5 tax levy funds, two classes at PS 15, a third grade and a sixth grade, and two classes at PS 64, a third grade and a fourth grade, were included. Under specific Title I funds each school housed bilingual classes in kindergarten, first grade and second grade. Distribution of classes and language dominance are displayed below in Table I:

TABLE I
Bilingual Class Distribution and Language Dominance

PS 15	K	Spanish Dominant
	1	Spanish Dominant
	1	Spanish Dominant
	2	Spanish Dominant
PS 34	K	Spanish Dominant
	1	English Dominant - Spanish Enrichment
	2	English Dominant - Spanish Enrichment
PS 64	K	Spanish Dominant
	1	Spanish Dominant
	2	Spanish Dominant
PS 110	K	English and Spanish Dominant
	1	English Dominant
	2	English Dominant, with some Spanish dominant pupils

TABLE I cont'd.

PS 160	K	Spanish Enrichment
	1	Spanish Dominant
	2	Spanish Dominant
PS 188	K	Spanish Dominant
	1	Spanish Dominant
	1	Spanish Dominant
	2	Spanish Dominant

Each class in grades one and two attended classes for the full school day while kindergarten classes were broken up into two smaller groups attending half day sessions. Thus the kindergarten teacher met with two groups of children, one group for a morning session and one group for an afternoon session.

Staffing

Each class was staffed by a licensed bilingual teacher and an educational assistant. The bilingual teacher provided classroom instruction in the group's dominant language as well as providing second language instruction and enrichment. Each school had an English as a Second Language (ESL) teacher who serviced pupils in the program by teaching one period of ESL per class per day and by providing additional tutoring or assistance where needed. The program also had a family worker whose function was to provide a bridge between the school, the home and the program with specific emphasis on assisting the family in making adjustments to school related matters, i.e. school attendance, etc.

The lines of authority for the program ran from the community school superintendent to the Title I coordinator to the bilingual coordinator, with the administrative oversight of the program residing in the assistant bilingual coordinator. The duties of the Assistant Coordinator included:

1. Making recommendations on the hiring of staff.
2. Providing staff training.
3. Ordering and distributing materials.
4. Facilitating communication between program teachers for the exchange and innovation of materials for curriculum implementation.
5. Acting as liaison between the program and host schools, and coordinating the program activities with those of the host schools.
6. Evaluation, planning and development of program materials.

The twenty-one teachers in the program had varying types of certification:

9 had regular licenses

5 had certificates of competency

6 had per diem licenses

1 had an intern license

All teachers showed mastery and knowledge of both languages. Some teachers were actively pursuing graduate training in bilingual education. Most of the teachers in the program were Puerto Ricans educated in mainland schools, and it was this staff characteristic that provided great strength to the program. It was this experience that was expressed by teachers most often when interviewed regarding their interest in and support of bilingual education. Mainland educational experience was cited as providing the insight into resolving pupil adjustment and language problems. This experience was often cited as the rationale for the commitment to the program ideology and the dedication to the students. Teacher experience varied however. On the whole, the young teaching staff was open to educational innovation based on realistic goals and firm, well developed plans.

Educational assistants were assigned to each class in the program so that they could provide instructional support to the classroom teacher. With teacher direction and supervision, educational assistant could help in individual and small group instruction, assist in the preparation of instructional materials and perform clerical, monitorial and escort duties for the class.

Materials

Materials in the program were drawn from many sources. Texts published by Santillana were used for the teaching of reading in Spanish, Texts for the teaching of reading in English were those used in the regular school program - usually these series were either Houghton-Mifflin or Bank Street. The Distar approach in language, reading readiness and initial decoding skills was also used in eight of the classrooms. The Addison-Wesley series was used in Mathematics and a published science series was also used. In addition classroom libraries were stocked with a diversity of books in English and in Spanish published in the United States, Latin America and Spain. Audio-visual equipment was also used as a means of instruction.

The Student Population

The total number of students participating was 597, and it was estimated by the director that most of these pupils were Spanish dominant. Selection for participation in the program was based on several factors. First of all child need was considered, then parent requests and consents were considered; these were followed by interviews. The assessment of the child's language proficiency and academic needs were determined by standardized test scores and a language proficiency rating. The Metropolitan Achievement Test scores were used to determine academic achievement in English. The teacher recommendation was based on a rating of one or two - i.e. no English or little English competency, on the New York City Board of Education's "Rating Sheet for Oral Language Proficiency". After the initial selection of students was completed and the program was underway, children in need of the program's services that were entering the school district, or children who were in other classes could be placed into program classes.

Curriculum

Program goals had been delineated along specific academic skills to be obtained by participating children during the school term. Thus the program designers had defined skill areas in terms of specific behaviors for the children. This delineation provided for a clear means of monitoring pupil progress that aided in maintaining a degree of teacher accountability. Thus the basic elementary academic curriculum was presented in the child's dominant language while the English as a Second Language component became an integral and coordinated part of classroom instruction. These guidelines were maintained to the degree that one teacher was observed instructing competent first language readers (Spanish) in acquiring second language reading skills (English).

In addition, enrichment activities were provided by cultural heritage experiences that were developed by the staff. To implement a positive self concept some aspects of the child's culture were presented in classes in the form of discussions and presentations on holiday themes and historical events. The methods and means of presentation were developed by the teaching staff with the assistance of the program coordinator. Thus some cultural aspects were integrated into the routine of the academic program. To provide continuity and closer association within each school, English langauge reading materials and study units from the host school were used in the classrooms. Program continuity and coordination were facilitated by the assistant coordinator through frequent school visits, individual teacher conferences and training sessions, and weekly workshops. In the weekly workshops held from 3:30 to 5:00 PM on Thursdays, the teachers met to receive specific pedagogic training, get orientations on trends in the bilingual education field, and to construct curricula for the program's specific needs as well as exchange ideas and methodologies.

Thus the class program consisted of skills acquisition and academic instruction in reading and mathematics in the child's dominant language, a daily period in ESL for the Spanish dominant pupils and a daily period of Spanish enrichment for the English dominant pupils. In addition Distar or other supplementary language work was conducted by the classroom teacher on a daily basis with groups of students.

Procedures

A. Achievement

Achievement was defined for the evaluation design as:

1) Kindergarten children were to exhibit more reading readiness after program intervention than before as measured by the New York City Prereading Assessment Test.
2) 1st and 2nd grade students will improve in Spanish reading as measured by the Interamerican.

The New York City Prereading Assessment was administered to the kindergarten classes, the first and second grade classes were assessed with the Interamerican Series in Reading. Tests were administered twice with a period of three months between pre and post administrations. All classes in the program were tested. Pretests were administered in February and posttests were administered in May 1974. Had pretests been administered in September the gain in posttest scores would have reflected the change in abilities due to a year of program input.

All testing data was analized statistically. "T" tests were performed on all sample data to determine whether score gains were due to chance scoring or if in fact the increase in scores were due to improvement. When the "t" test is said to have proved statistical significance ($p \leq .05$), it means that gain scores are most probably not due to chance but are in fact indications that there has been improvement in the skill being measured.

B. Interviews

Interviews were conducted on many occassions with the program coordinator at the district office and with teachers at their schools. The coordinator was interviewed before testing and classroom observations were begun in February, 1974. The initial interview provided the coordinator an opportunity to suggest areas of inquiry to be included in the classroom observation tool. Interviews were then held periodically to advise the coordinator about the progress of the evaluation. At the end of the school year the coordinator was consulted to discuss the final evaluation.

Classroom teachers were interviewed during observation periods. Interviews consisted of informal discussions where open ended questions were asked regarding materials used, the aims of lessons observed and program goals. Teachers were encouraged to respond freely with the understanding that conversations would be kept confidential. 75% of the teachers were interviewed once and 85% of these teachers were interviewed a second time. The results of the interviews will be discussed in the results section of this report.

C. Observations

Observations were conducted throughout the evaluation period from February 1974 to June 15, 1974. Each class was observed on two separate occasions for a total of 50 minutes observation time per classroom.

Skill acquisition was observed in lessons. Each observation session consisted of a 20 minute observation period and a 5 minute coding period. The purpose of the coding period was to record the content of the lesson, classroom linguistic composition (i.e. number of Spanish dominant and number of English dominant pupils) language usage, teaching style and material utilization. A copy of the observation tool will be found in the Appendix of this report.

Results

1. Reading

a. Kindergarten

Kindergarten pupils were tested with the New York City Prereading Assessment which is an instrument devised by the New York City Board of Education. It measures visual discrimination and picture vocabulary. The pupils are required to identify objects when spoken descriptions are given to them and they must also identify similarities and differences in letters and words. The test assesses the prereading skills; thus the child's performance gives evidence of readiness to begin reading instruction. The table below shows the mean scores, standard deviations and t ratios of the Kindergarten sample. The two scores shown are for the vocabulary and the visual discrimination subtests.

Table 1 Achievement in Kindergarten Reading Readiness as Measured by the New York City Prereading Assessment (N=88)

	N	Pretest Mean	SD	Posttest Mean	SD	t ratio
Language	88	23.76	4.48	27.28	4.21	8.54**
Visual Discrimination	88	17.99	6.81	23.36	5.81	7.55**

$^{**}p \leq .001$

Statistically significant improvement was achieved by Kindergarten classes. Differences in pretest subtest scores may have been due to a lag in the development of visual skills, however the closer uniformity of posttest subtest scores indicates that there was growth in both skill areas. This indicates that there was exposure to activities and instruction in these skills. Composite pretest and posttest scores approach the above average ratings defined by the interpretive scales supplied by the test publishers. These ratings are said to indicate readiness for entering first graders. Therefore it can be concluded that this Kindergarten group is ready to begin formal reading instruction and that they have met the evaluation design's criteria for success.

b. First Grade

Reading achievement was assessed with the Interamerican Series because these reading tests provide equivalent English and Spanish test versions at each appropriate grade level. The tests are reported to provide measures of ability and achievement in language without translating cultural bias from one version to the other. Table 2 represents the results for the testing of first grade pupils on the Spanish test version. Table 3 represents the results for the first grade English reading sample.

Table 2 Spanish Reading Achievement of First Grade as Measured by the Interamerican Series (N=61)

	N	Pretest Mean	SD	Posttest Mean	SD	t ratio
vocabulary	60	11.55	9.86	20.03	11.70	7.75**
comprehension	41	7.38	5.71	16.03	11.67	6.90**
total	61	16.97	14.56	33.57	22.74	8.56**

** $p \leq .001$

The gain measured is statistically significant, indicating that there was improvement. Standard deviations for pretest and posttest scores indicate that there was great variability between scores such that some pupils did very well while others did poorly on the tests, although the sample showed gains in scores. Comparison with published normative data can only be done with some reservation. Samples used in the norming of these tests were essentially single language populations. Pupils in the norming sample had not been exposed to a second language in a systematic instructional mode. One must consider that the norm sample had a common language code by which to arrive at word meaning and concept understanding. The bilingual language learning strategy is compounded by the acquisition of the second language. The bilingual may have to use one language code as a means of learning another. His language learning strategy may involve other mediating processess not understood. Since the Interamerican Series was not created with the specific intent of evaluating the achievement of pupils receiving bilingual instruction, the construction of test items did not take possible solving strategies used by bilinguals into account.

If a comparison is made with last year's sample, the mean posttest score was 30.4 with an S.D. of 15.6 and 33.57 with an S.D. of 22.74 in 1974. It can be concluded that the program has maintained the same level of achievement for both first grade groups while increasing the number of children serviced.

Table 3 English Reading Achievement of First Grade as Measured by the Interamerican (N=35)

	N	Pretest Mean	SD	Posttest Mean	SD	t ratio
vocabulary	34	11.29	5.92	18.91	8.85	6.11**
comprehension	33	8.73	6.29	12.33	8.20	4.09**
Total	35	19.17	12.12	30.66	15.75	6.33**

**$p \leq .001$

Statistically significant improvement was achieved by English readers. This group is functioning on a level comparable to their Spanish reading classmates. Scores here are less variable than those for the Spanish sample indicating that the mean is a better reflecter of the English reading group's performance. Since no other English test data are available this sample can not be compared with other first graders in the district. There was no English reading sample in the previous year so that a comparison of program performance is not possible.

c. Second Grade

Pupils were tested with either the English or Spanish version of the Interamerican reading series. Table 4 contains the results of the Spanish reading sample and Table 5 contains the results of the English reading sample.

Table 4 Spanish Reading Achievement for Second Grade as Measured by the Interamerican. (N=57)

	N	Pretest Mean	SD	Posttest Mean	SD	t ratio
vocabulary	57	19.86	11.39	23.24	12.56	3.44**
comprehension	49	14.53	9.99	17.47	11.62	2.42*
Total	57	32.51	20.59	39.89	22.54	4.05**

$**p \leq .001$ $*p \leq .05$

The gain in reading ability was statistically significant. Standard deviation values for both pretest and posttest scores indicate that there was variability among individual scores.

Table 5 English Reading Achievement for Second Grade as Measured by the Interamerican. (N=48)

	N	Pretest Mean	SD	Posttest Mean	SD	t ratio
vocabulary	47	15.21	9.29	23.70	10.54	7.25**
comprehension	44	11.82	8.44	19.18	11.26	5.70**
Total	48	25.29	16.66	42.23	21.26	7.99**

$**p \leq .001$

Improvement in reading is statistically significant and when the English reading sample is compared to their Spanish reading classmates, both groups are functioning on a comparable level. The English reading sample was not tested with other English reading tests so that district-wide comparisons can not be made on their reading performance.

B. Interviews

Informal discussions with teachers revealed that all interviewed understood the concept of bilingual education. Most were able to define how bilingualism would be implemented by the program. There was sufficient knowledge of curriculum materials. However when asked how materials could be adapted to meet specific program needs some teachers had difficulty responding.

C. Observations

Classroom observations were used to compile information regarding the physical setting, material utilization, program content and language usage. Classrooms were decorated and children's work was displayed. Room organization did not always reflect divisions into specific subject areas. A variety of texts and library books were in evidence in all classes. Few manipulative materials were in evidence in any classroom beyond Kindergarten. Classroom displays indicated strong emphasis on reading and math. Social Studies bulletin boards conveyed the same cultural theme in most classrooms on all grade levels. The cultural displays consisted of the Puerto Rican flag, map of Puerto Rico, the Bohio in which the Taino Indian lived and photographs of El Moro Castle. Most activites observed were organized such that whole class instruction or small group instruction were conducted by the teacher and other educational assistants. In 80 to 85% of the lessons observed language usage was consistent in the context of lessons as well as in informal conversations. 90% of the teachers showed no evidence of language mixture in their usage. 90% of the teachers responded to pupils' linguistically mixed sentences, by allowing the pupil to express his ideas and providing the appropriate term in their response to pupils. Pupils were never reprimanded or overtly corrected for their language usuage, but rather most teachers provided the appropriate alternative language model.

Summary

The Elementary Bilingual Program completed the second year of operation. It had successfully attained its objectives in reading readiness and reading. It has maintained or surpassed the level in prereading and reading of proficiency established in the first year while increasing in size to provide services to more pupils. Pupils reading in Spanish and English were found to be performing on comparable levels indicating that the program has delivered the same quality of instruction for both groups of pupils.

Classroom observations and teacher interviews indicated that there was dedication to the program and an understanding of program function. However, observations also revealed that there was need for teacher training to concentrate on teacher language awareness and uniformity in terminology used in subject areas. Although this program does not have a cultural component as such, observations indicated that this aspect was being conveyed in a limited somewhat stereotypical manner.

APPENDIX A

Observation Schedule for Bilingual-Bicultural and Bilingual Classes

Date____________ Time___________ Duration of Observation____________

School_________________ Class___________ Teacher______________________

Number of Students Present____________________

Other Adults_____________ Title of other Adults_____________________

I. Dominant language of students:

(Number)

English ____________

Spanish____________

II. Classroom:

1. Classroom Library: describe content________________________

language_________________________

2. Exhibits of Student work: describe content________________

3. Classroom exhibits: describe content______________________

4. Describe manipulative materials and audio-visual equipment ____

____

5. Textbooks: (List) ________________________________

6. Describe materials dealing with Hispanic culture_________

____

7. Describe materials dealing with Anglo-American culture

____

III. Classroom organization - circle one(s)in each category.

1. whole class, groups, individualized, pupil-pupil or teacher-pupil tutorials

2. one teacher, team teaching, teacher and other adults each with small group.

IV. Language of Instructional Content

1. subject or content area:_____________________________

2. Describe language of: a) teacher or other adult______

____

b) children ____________________

____

(Use: Spanish, English, Half Spanish-Half English,
Mixed sentences; alternation - translation of
each sentence, "Spanglish".)

V. Cultural and/or Bicultural Aspects of Lesson (circle appropriate ones)

a) Customs, Goods, social structure

b) Interpersonal behavior - gestures, verbal and non-verbal behavior.

VI. Interpersonal Aspects of Instructional Style

1. Teacher or other adult provide opportunity to answer questions and share experiences? Which?
2. Is there positive physical contact between teacher and individual pupils?
3. Does the teacher encourage the use of other adults as resource persons?
4. Does the teacher encourage the use of other children as resource persons?
5. Teacher regard for pupils
   a. Describe how the teacher responds to pupils initiating interaction.

   b. Describe how the teacher responds to pupil language mixture.

CHINESE-ENGLISH BILINGUAL PROGRAM

Community School Board District I

Part I Program Description

The Community School Board District I Chinese-English Title I ESEA Bilingual Program according to its proposal was funded to provide remedial academic and cultural support for ethnic Chinese children who, because of their language barrier, have difficulty learning academic subjects in an English-speaking environment. Authorized on 10/9/73, the program was funded for operation from 9/6/73 to 6/30/74. It began operation on 10/9/73.

The Census of School Population, compiled in 1971 by the Central Board of Education showed that District I had a total of 17,994 students, 71% of whom were Hispanic, 15.1% Black, and 5.3% Chinese. By 1973-74, according to the current proposal, the proportions had risen to 75% Hispanic and 5.5% Chinese. The proposal also states that the number of District I students with major English-language difficulties is larger than that of any other district in New York City. Consequently, remedial language learning has been a major focus within the District.

An H.E.W. survey conducted several years ago in the District found that, of 402 Chinese familes interviewed, an overwhelming majority (97%) favored Chinese Studies in the schools and 89% favored bilingual and bicultural education. Because of its Title I funding, however, the current bilingual program may only work in the area of bilingual academic support and remedial English. Cultural and Ethnic studies must be funded from other sources.

A. Sites: The District I Chinese-English Bilingual Program maintained eight classes at six different school sites, all located between 14th Street on the North, Delancy Street on the South, First Avenue on the West and the East River Drive. The most modern building that housed a program site is J.H.S. 22, or P.S. 20; it is difficult to ascertain which of the remaining schools is oldest. Because of their late entry into the schools, Chinese bilingual classrooms generally occupied rooms designed for other purposes; in one case, it shared its room with the parent committee. Rooms tended to be small and easily missed except for the usual bright red sign.

Six classes were located in elementary schools: P.S. 20, 166 Essex Street (one class); P.S.63, 121 East 3rd Street (two classes); and P.S. 160, 170 Suffolk Street (two classes, one classroom). Three junior high school classes were maintained in J.H.S. 22, 111 Columbia Street; J.H.S. 60, 420 East 12th Street; and J.H.S. 71, 75th Avenue B (See map, attachment 1).

B. Staffing: The funded district staff consisted of an assistant project coordinator for Chinese bilingual programs, who worked under the district bilingual coordinator, and a family worker. The family worker was also available to act as a teaching assistant. A clerk-typist was hired previously but later dropped from the program.

Problems in approving candidates precluded the hiring of a teacher trainer and a second family worker under tax-levy funding earlier this year, before tax-levy funding was cut. The current family worker essentially covered three sites.

The teaching staff consisted of eight bilingual Chinese teachers and eight bilingual teaching assistants. Each teacher worked with one bilingual teaching assistant. All teachers had completed some degree at the graduate level; one teacher had a Ph.D. in Linguistics. Major fields varied from teacher to teacher.

Three teachers held New York City Bilingual Teaching licenses; the others held Certificates of Competency; most were in the process of applying for city licenses.

Three teachers were native Cantonese speakers, two more were fluent in Cantonese and two spoke a little Cantonese. All spoke Mandarin. Seven of the paraprofessionals were fluent in Cantonese; one spoke it moderately well. English fluency varied widely.

All staff were hired by the project coordinator and a parent screening committee. According to parent committee rating sheets each applicant for teacher and paraprofessional positions were rated for educational background, teaching experience, attitudes toward children, community experience, commitment, English, Cantonese, Mandarin, and certification. Strength in one area apparently could balance weakness in other areas.

All of the teachers appeared to have a strong desire to do well. Subjective information is included in the specific site data of this evaluation report as well as analysis of teacher questionnaires.

C. Materials: The teaching materials used in the classrooms came chiefly from the assistant project coordinator and individual school sites. Work sheets and flash cards were designed by individual teachers. Materials provided by the Bilingual program were divided almost equally between Chinese language and culture materials and English language materials. In the majority of the cases, materials and texts actually used in working directly with children were provided by the individual schools in which the classes were located.

English books given by the program to each site were generally reference texts for teachers or for more advanced students. Each class was provided copies of English-Step by Step by Boggs and Dixon (Regents) Learning to Use English by Finocchiaro (Simon and Schuster), and others. In addition, Chinese cultural materials distributed on a general basis consisted of the Gu[illegible] Yu Chinese Reading Series, published in Taiwan, Hwa Wen Ru Men series for teaching Chinese to English-speaking children, and the more adadvanced DeFrancis series of Chinese Language Texts, which were donated to the program.

Materials used at specific sites will be described under specific site data.

D. Student Population: The Bilingual program reached about 200 of approximately 1000 ethnic Chinese children in grades 1-9. Eligibility of children for this program, as for all Title I ESEA programs, was determined by reading level; in this case the scores on the bi-annually administered Metropolitan Achievement Tests; only children scoring at least two years behind grade level on the MAT was eligible to join the program. About 60 children were dropped from the program in mid-year because of ineligibility under these guidelines. Between testing dates a newcomer is admitted to the program, without the MAT, at the request of the tax levy teachers responsible for the child. Observation also showed that in many cases, ethnic Chinese children not in the program -- and a few Kung Fu buffs from other ethnic groups -- did drop in for cultural support, information, and conversation in both languages.

Various Cantonese dialects predominated as the first language of the children in the program. Approximately 20 to 40 percent of the children had Mandarin as their first language. The Mandarin-dominant children were scattered fairly evenly among the various school sites. The English fluency of observed children ranged from practically non-existent to highly developed. Student-teacher interchange appeared to be about 50 percent in Chinese language but varied widely with individual classes.

The average class size was about 25 children. However, because of problems in integrating the regular tax-levy teaching schedules, only a few children come to the bilingual program at a time. Many class periods had one or two children, producing a one-to-one or two-to-one teacher-pupil ratio.

Despite the relatively constant number of children that were in the program, turnover had been high as families moved into and away from the district. The program, despite losses from eligibility requirements, was fairly close to its initial size as the number of Chinese immigrant families continued to rise. Despite the non-availability of accurate data forecasts, the expectation is that the number of Chinese families moving into the area will increase, thus evening out the teacher-pupil ratios.

E. Curriculum: Curricular objectives have been clouded, since the initial proposal called for two objectives: i.e., 1) bilingual and remedial English teaching to increase English reading ability, and 2) bicultural education for English-dominant children of Chinese background. Because of Title I requirements, the second objective target population, that is, ethnic Chinese English-dominant children, is ineligible and the entire cultural program has been severely curtailed. Some doubt remains as to whether or not bicultural education for Chinese children, even in an English-learning context, is allowable under Title I ESEA. Each site has modified these initial objectives in various ways, which will be described in specific site data of this program report. This ambivalence, however, poses certain specific problems for the program, and several recommendations concerning curricular objectives are included in the final part of this evaluation report.

DISTRICT I - TITLE I - CHINESE/ENGLISH BILINGUAL PROGRAM EDUCATION

J.H.S. 60 - 420 East 12th Street

Specific Site Description

Site

J.H.S. 60 is an aging brick structure between First Avenue and Avenue "A". It is the northernmost of the District I schools with a Chinese-English Title I program.

The bilingual classroom itself shared its small space with the Parents Association, a result of the program's entering the school too late for allocation of a regular classroom. The room was relatively light, with multi-cultural displays and crafts, many of which are the property of the parents association, on the walls. It seated only about 10 people at one time comfortably.

Staffing

The teacher was one of the most academically advanced of any in the program. He possesses three degrees from an American university: An MAT in Linguistics, an MAT in English Language, and a Ph.D. in English Education. He stated that he had also completed post-Ph.D. work in English literature. He speaks mainly Mandarin, but is studying Cantonese in order to obtain a city bilingual license.

The teaching assistant is also Mandarin-speaking, but has studied Cantonese and stayed in Hong Kong, a Cantonese-dominant area, for a time. He has a B.A. and taught English in a Taiwan language institute for eight years.

Both staff members appeared highly interested in improving the bilingual program and expanding its scope as well as its population. The teacher himself is interested in English as a Second Language and Urban Education to complement the traditional Chinese Culture and Language and remedial English on which they are currently concentrating. They were aware of alternative funding for the cultural component of the program and had helped with the proposal.

Their records were easily available for MAT scores, reading, worksheets, etc. Their records were highly organized and systematic.

Materials

The dominant materials for English were English Step-by-Step (Regents) and Learning to Use English (Simon & Shuster). They also had a collection of reference tests, many from the teachers' own library. They also stated that they used materials from the school's own language programs, but they were chiefly phonics books. In addition, there were teacher-developed tests, kept in a notebook.

The cultural aspect was structured from the teachers' own carefully organized notes. In addition, some Chinese Language materials were also used.

In general, the materials seemed difficult for junior high children with English difficulties. This was a problem with the English materials, but the teacher stated that he adapted the materials to fit the child. At the same time, the materials which they acquired from the school rather than from the bilingual program were more appropriate for the children with difficulties. The Chinese cultural materials were very thorough, but in the case of the cultural test, some aspects were vague and easily confused (in either language) although the Chinese tended to be less ambiguous than the English versions. The Chinese language learning materials went from very easy primer-level to high school.

Student Population

According to the November Graph of Student Population, J.H.S. 60 had 51 Chinese students. In June there were 54. Of these, 25 were still participating in the bilingual program. Parental permission and MAT scores blocked the others, according to the teacher.

There was some ambiguity about program reading score requirements, particularly for children admitted to the program without MAT scores. In several cases their April scores were higher than grade level. It was felt that these children could benefit other children in the program, benefit from the cultural component, and complete programs which they had begun; therefore, they were to be kept in the program for the few remaining weeks.

Of the 25 children, the first language for five is Mandarin. The first language of the remaining 23 is Cantonese or a variant thereof. Many of the Cantonese children also speak Mandarin with variable levels of fluency.

Curriculum

The schedule was predicted upon students being released by their regular tax levy teachers. Four hours a week there were at least four students in class; the remaining time was mainly tutorial and one-to-one for one or two students.

The Group class hours were divided into two parts: one half was language, Chinese and English; and one half was culture, with the teaching being done in both Chinese and English.

The tutorials were focused upon remedial content: Social Studies, Science, and Math. Four students are reached via tutorials; one student, who was from Taiwan, was tutored 15 hours a week. Three tutorial students came mainly for language culture.

The remedial aspect of the program was influenced by the presence of a full-time remedial reading class in the school, which had some Chinese students. This was one of the reasons the bilingual teacher would have preferred to go into TEFL -- to complement the remedial program.

The cultural component of the program was dominant in that class. Both staff members had invested a lot of time and work into this aspect. The program-wide cultural test was partly developed by them.

They viewed cultural acquisition through both languages. The culture classes were conducted about 2/3 of the time in English, the rest Mandarin. Mandarin for Cantonese speakers was considered one aspect of the cultural program.

The remedial content-teaching, because of the difficulty of getting eligible children and lack of teacher referrals, was given to only one child; both teachers felt strongly that they would have liked to expand the number of children in the program and that they could easily handle many more children.

SPECIFIC SITE DATA

J.H.S. 71 - 75 Avenue B

Site

J.H.S. 71 is located between 4th and 6th Streets. It cuts off part of 5th Street, a cul-de-sac, of tenements and urban renewal. The building houses the administrative offices of District I as well as the junior high school.

The Chinese bilingual program was located in a narrow room whose space seemed crowded with tables. The walls had some children's work and cultural exhibits.

Staffing

The teacher has an M.A. in Elementary Education, holds a certificate of competency for common branches and has applied for a bilingual city license. Her first language is Mandarin, and she knows a little Cantonese. She makes worksheets and materials to some extent, and is interested in new materials.

The teaching assistant is Cantonese with an intense interest in Chinese-American work as well as traditional Chinese programs, and is active in several Chinatown organizations. She speaks both Cantonese and Mandarin, and is highly interested in expanding her bilingual teaching skills and receiving training. She is very articulate in both English and Chinese.

Materials

Both staff members have developed work sheets and tests in the language, cultural, and content areas such as math components of the program. Most of the textbooks and materials used in the classes were provided by the school, including: Real Stories (Globe Book Co.), an easy-reading, high motivation series with activities in word attack, comprehension, vocabulary, and other essential reading skills; The Reading Booster Code Book (McGraw-Hill), and various phonics materials.

Program-provided materials were generally used as reference or as part of the Chinese-language and culture component; i.e.: Modern American English

(Regents) and the California Cantonese based language primer system of Hwa Wen Ru Men.

The materials developed by the staff members come from other sources, such as making puzzles up from phonetic word lists, or specific skills games such as filling in prepositions (context skills development). All staff-made materials were carefully prepared.

Student Population

The J.H.S. 71 program reached about 20 of the approximately 48 children in the school's 6-7th graders, 7-8th graders, and three ninth graders; although 27 are listed on the attendance sheets.

Although the teacher states that there are 27 children in the program, only 16 children were listed on the weekly class schedule. This had not been resolved. About six of the children speak Mandarin as the first language; two spoke both Cantonese and Mandarin; the remainder spoke only Cantonese.

One of the staff members noted that all of the children were immigrants from Hong Kong or Taiwan. Those from Hong Kong have been in the U.S. longer and speak English fairly well. The students from Taiwan were recent immigrants who needed a lot of help in English. All were at least two years behind on MAT.

Curriculum

The curriculum is mostly remedial English with some content teaching such as math and Chinese culture. The children came at scattered times, according to the class schedules of their regular teachers. From 8:45 to 9:30 a group of five children worked with the bilingual class for two hours. Before lunch, depending on the day, class size ranged from five children to one on one.

Both teachers would like to see the cultural component expanded; non-Chinese children have been interested in a Chinese culture class, as well as Chinese students ineligible for Title I help.

SPECIFIC SITE DATA

P.S. 63 (I) - 121 East 3rd Street

P.S. 63 is located between First Avenue and Avenue "A", partially enclosed by the First Avenue Housing Project. This site had two classes: the class on the main floor worked with children from first to third grades; older children from fourth to sixth grades were taught in a separate space up two flights of stairs to the fourth floor. For the purposes of this site description, the primary-level class and the upper-elementary class will be discussed separately. Total number of children was approximately 54.

Primary

Site

Was located in a long, relatively large room decorated with displays of children's work and cultural displays, including a poster depicting all 108 heroes, neatly labeled, of the classical Chinese novel, Water Margin. The environment was comfortable and colorful, with a large red welcome sign on the entry way.

Staffing

The teacher was a fully licensed bilingual teacher who had studied in China and the U.S. She speaks Cantonese, Mandarin and English. She was interested in the program and how it could be improved. During the site visit, the class was visited by the tax-levy remedial reading teacher. Each teacher seemed interested in complementing the others' program. This teacher was the only teaching staff member from this program to attend the international bilingual conference in the spring.

The teaching assistant, a native Cantonese, was in and out helping a Chinese parent deal with language difficulties over a gas bill. She filled many of the duties handled at other schools by the family worker as well as her bilingual teaching duties. Her relationship with this parent seemed quite good. Although she had no bilingual or teacher training, she seemed committed and said she would like more training.

Materials

Most of the materials used came from the school; the bilingual program's English materials are too advanced for primary children. Curricula centered around the primer language series: Fun Wherever We Are (Scott Foresman), Phonics We Use, Spelling and Using Words, and Fun with Our Friends, all of which are used in the tax-levy reading programs. Some Chinese-English flash cards were also in evidence. Both staff members felt the lack of adequate audio-visual equipment and primer-level Chinese-English materials.

Student Population

This element of the program reached about 35 out of the 130 students in the school, via small groups and tutorials. The children were mostly second, third, and fourth graders. No age breakdown was available. Ninety percent of the children spoke Cantonese as their first language.

Curriculum

The curriculum was mostly in remedial English and content area, such as math and social studies. Particular content area needs were decided by the regular teachers, as well as hours for the children to come to class.

Children's work on the blackboard was in both Chinese and English. Title One regulations had curtailed the cultural component of the program. English was dominant in observed teacher-pupil interactions. Children worked mostly in small group situations which switched according to their needs as determined by the regular teachers. As at P.S. 20, the bilingual teacher feels a need for a more consistent approach to curricula than that currently in use.

P.S. 63 (II)

Elementary

Site

The room is brightened by curtains and posters and is small with more than an adequate number of tables.

Staffing

The original teacher, who held a full city bilingual license, left in early May to become coordinator of a bilingual program in a neighboring district.

The present teacher also holds a city license, speaks Cantonese, Mandarin, and Vietnamese as well as English and holds an M.A. from Columbia University, in the Teaching of English as a second language, and an M.S. in audio-visual communications.

The current teacher is highly concerned about teaching English as a second language, but had not contacted the tax-levy program on complementing what they were doing, although he planned to do so in the near future. He was particularly concerned with specific oral errors.

The teaching assistant taught Chinese in Hong Kong before coming to the United States. She taught school for ten years and worked as a teacher's aide in Head Start before coming to this program. She would like to improve both her teaching skills and materials.

Materials

The materials came from the program, the school, and the teachers' personal library. The focus was on English Sentence Patterns by Charles Fries (University of Michigan, the Lado-Fries oral-aural language learning program used in all levels of language teaching). In addition, English Step-by Step and Modern American English had been provided by the program, as well as an opaque Chinese-authored book entitled Essentials of English Grammar (Ying Wah Press, Hong Kong). The teacher also had copies of tests and worksheets on usage hehad designed and used with his classes.

Chinese cultural materials were also used to some extent, particularly the ubiquitous Hwa Wen Ru Men Chinese Primer Series.

Student Population

The program reached about 20 children from the fourth to the sixth grade. Students were sent by teachers, when parental permission was obtained. A large majority of the children spoke either Cantonese or its Toysan variant. Several of the children tested within two years of their grade level. The teacher would like to expand the population base and work with each child for a longer period.

Curriculum

The children were scattered rather thinly over the week, dependent on the regular teachers' schedules. The curriculum was divided between content work and oral English. In one case, the teacher noted that an eligible child had not been able to come to the program because of scheduling conflicts.

About 11½ hours a week were spent in teaching English grammar and TESL. The Chinese Culture Club met in the classroom twice a week. Chinese language was taught two hours a week, and Chinese Culture was taught 4½ hours a week. The format was often ½ hour English and ½ hour culture, with English being the dominant teaching medium.

SPECIFIC SITE DATA

P.S. 20 - 166 Essex Street

Site

P.S. 20 is located on Essex Street between Stanton and Houston Streets. It is a relatively new school in better shape than other observed schools.

The bilingual classroom itself was the largest classroom of the bilingual sites; very clean and light with one bulletin board and several displays of both Chinese culture and children's work.

Staffing

The teacher spoke Mandarin, and some Cantonese as well as English, and has an M.Ed. She had a certificate of competency. She had a wide familiarity with materials and practices and felt that she would like to learn more. At the beginning of the year she was considered for the then-available position of teacher trainer for the program but was blocked by her lack of a teaching license. She recently left the program for another teaching position.

The teaching assistant was Cantonese with little professional training. She also felt the need for more training.

Both staff members wished to expand their program to include more children. They had obviously put a lot of work into their program.

Materials

The core of the English-language curriculum seems to be the Structural Reading Series, a primer series based on structural analysis and patterns using visual reinforcement of words. Phonics We Use and The Alphabet Book were also visibly incorporated into the observed lessons. These materials are standard primers, and both staff members provided assistance to the children in decoding and comprehension. The teacher-pupil interchange was about 50-50 English-Chinese. English Step-By-Step was also present, but its reading level was too advanced for the children at this site. Other program-provided materials, with the exception of the Gwo Yu series of Chinese Language primers, were too advanced and used mainly for reference. A set of child-made flash cards was also in evidence, using vocabulary taken from the workbook and showing some careful art work.

Both staff members would like other materials, especially audio-visual materials and games such as Lotto. They seemed willing to make them, but money for materials to construct games was not available, and moreover, theu did not seem familiar with how to go about making practical, inexpensive, fun, language games.

Student Population

Of 57 Chinese children in P.S. 20 as of November, 1973, this class reached about 27, all of them reading two years behind grade level. Originally more students were included but Title I requirements necessitated dropping about 20 children. Both staff members would like to see the program expanded to include more cultural emphasis for kindergarten and other Chinese students not eligible for Title I funding.

Their youngest student is six years old, the oldest is twelve, and the total population went from first to sixth grade. Three children spoke Mandarin as their primary language; the rest spoke variants of Cantonese. Many of the students progressed very rapidly-one child, who was said to have come to the U.S. in November, was speaking English smoothly in May.

Curriculum

The curriculum was balanced between remedial reading for curricular subjects such as math and science and remedial reading enrichment. Some of the students also went to the ESL program and the Chinese bilingual teachers tried to avoid redundancy.

What each child needed was usually determined by his regular teacher, who conferred with the Chinese teacher on what special work was appropriate. Chinese culture, because of Title I requirements, had been curtailed. In addition, the necessity of adjusting each child's program to fit his regular classroom needs, which may vary from week to week, obviated many opportunities to create a planned curriculum. On one occasion, a class was cancelled at the last minute because the regular class was on a field trip, and the observer was left without a class to observe. In addition, the necessity to take each child only as he is freed from his regular class schedule precluded any large consistent group, and the teachers felt that this had hindered the effectiveness of their program. Their largest group was five from one class for one hour a week. This could conceivably be worked out if the bilingual program were incorporated into regular school planning in September.

SPECIFIC SITE DATA

P.S. 160 - 107 Suffolk Street

Site

P.S. 160 is located at the intersection of Rivington and Suffolk in an aging brick structure. Inside, the school is clean and relatively cheery.

The bilingual class was actually two classes in one room, but the actual situation appeared to be a team or paired approach. The room was large, airy, and bright with children's work and posters. The bilingual classes have participated in several schoolwide functions; at one time of observation, the children were making posters in English and Chinese for a school assembly. The noise level of two groups interacting was relatively high.

Staffing

The class staff consisted of two teachers and two teaching assistants.

One of the teachers was a fully licensed bilingual teacher with an M.S. in Education. Although she was highly skilled, highly rated, and competent, her main information to this evaluator consisted of giving access to materials and observation. She spoke both Cantonese and Mandarin.

The second teacher held a certificate of competency and a Master's degree. She speaks English, Mandarin, and some Cantonese. The two teaching assistants were both motivated and interested in further training. One was studying at the New York City Community College. The other, who holds an A.B. in Music, would like to introduce some music education into the program, which has been done in other ethnically oriented programs in various districts. Both speak Cantonese.

Materials

A wide range of materials was displayed at a table in one corner of the room, including remedial and primary English materials from Science Research Associates (SRA), the Bank Street Reader Series, Phonics We Use, The Alphabet Book; language games such as Animal Lotto, which came from the school; program-provided reference and cultural works, ranging from the DeFrancis series used to teach Chinese to English-speaking college students to the basic Hwa Wen Ru Men Language Primer. Observed groups used the Hwa Wen Ru Men and some Phonics We Use.

At one of the observed groups, simple teacher-made worksheets were in evidence. There was a stated need to develop special bilingual textbooks to use in the class.

Student Population

This program reached 32 children, grades 1-6, out of 90 in the school. Most of the children speak Cantonese; it was also stated that some American-born Chinese participated in the cultural component of the program. MAT scores for the children enrolled were not available. But the class lost 24 children as ineligible under Title I guidelines. New arrivals were all from Taiwan. The children appeared highly motivated and eager to answer questions.

Curriculum

The initial schedule called for content area language work in the morning and cultural studies in the afternoon. That has been modified for Title I so that Remedial English has taken over all but the math content area time. Chinese language and culture was taught in the afternoon. The classes ranged from individual tutorial to small group, depending on the schedule of regular classes.

Each teacher took a small group; in one observed situation, one group was doing remedial word skills on the blackboard and in the opposite corner a group was working with a Chinese Language workbook. Teacher-pupil and teacher-teacher interaction was predominantly Chinese

The afternoon classes concentrated on Chinese Language, (spoken and written), holidays and history, (especially for children in the upper grades). All staff wanted to expand the Chinese cultural component.

SITE DESCRIPTION DATA

J.H.S. 22 - 111 Columbia Street

Site

J.H.S 22 occupies the corner space on East Houston between Hamilton Fish Park and Masaryk Towers. The physical plant is the most modern of any schools with Chinese-English Title I programs, but it has been heavily defaced and vandalized.

The hallway bulletin board outside the Chinese bilingual classroom was empty; it was set afire the last time anyone mounted a display on it.

The classroom itself is located in a narrow room -- a leftover, since most space had been allocated to other needs by the time the bilingual program moved in, in October. In contrast, however, to the bare hallway, the room itself was bright and relatively cheery, with displays of children's work, Chinese art and writing scattered upon the walls. The several tables in the room were close together; at the times of observation, the children stayed together at one table.

Staffing

The teacher had a Master's degree in Psychology, and taught college before coming to the bilingual program. He grew up in North China but spent several years in Hong Kong. He spoke Mandarin and Cantonese as well as English. He held a certificat of Competency in Common Branches.

He was a thoughtful person with a high desire that his students do well. He had knowledge of both modern and classical Chinese culture, and an intense interest in communicating this knowledge to Ethnic Chinese children in the school. He stated that Chinese children ineligible for the program because of Title I restrictions came around during lunch hours for information and conversation, creative, an informal Chinese cultural center. Children from other minorities occasionally dropped by also to discuss Bruce Lee and related subjects.

The teaching assistant had no formal bilingual training, spoke both Mandarin and Cantonese, regarded her experience raising her own children as practical training for the program but wanted more formal training. She lives less than three blocks from the school. She was found to be a warm person with whom the students seem to have a good, if indefinite relationship.

Both staff members were highly articulate and visibly interested in improving the program in terms both of pedagogy and cultural consciousness. Despite problems with adapting the program to fit the school, both people displayed a high level of motivation.

Materials

Most of the materials used in the class came from the schoo, including: Our Language Today (American Book Co.), Words are Important (Hammond). The City Board of Education Intensive Reading Program. Learning to Use English and Modern American English, provided by the program, were also used for some students, as was English Step-By-Step. In addition, materials such as newspapers were used to provide concrete reading skills development. A range of well-thumbed reference materials including maths texts, was also visible on the teacher's desk.

The classroom had a range of cultural references; some provided by the program, some provided by the school. The cultural texts observed in the class varied from primer to post-graduate level and covered several different approaches to aspects of Chinese culture and language. The teaching assistant appeared more familiar with the more elementary levels; the teacher was able to give brief, relatively accurate analyses of some of the more advanced materials. Both people were interested in developing alternative materials; especially for the cultural component, using English language skills, teaching, and in developing and using language games.

Student Population

This element reached 27 ethnic Chinese students out of 86 in the school. Of the children not in the program, approximately half (24) are in the tax-levy English as a Second Language class, which is a self-contained program, maintained by the school. The remainder appear to have little or no problem with English.

Seventeen of the children spoke Cantonese as their first language. They were divided almost equally by grade. Oral English language fluency ranges from non-existent to highly developed. In the observed situations, students switched from English to Cantonese with relative ease, as vocabulary demanded. The teachers used English about three-fourths of the observed time, again, according to comprehension and vocabulary demands. The children seemed boluble and outspoken in either language.

Both staff members wanted to broaden the program to reach more children with broader curricula. All the children currently enrolled in the program met Title I guidelines, but a need was felt for servicing children reading within two years of grade level and for a way to complement the ESL program. Both teachers seemed sincerely concerned with reaching out to new children and improving the skills of those in the program.

Curriculum

The English component in most cases was incorporated into cultural and other content areas. Cultural aspects taught included Chinese History, Literature, Language and Remedial Mathematics. The breakdown on a weekly basis was about four hours, English; culture and language, six hours; Literature and Grammar, four hours; History, three hours; and Math, three hours.

Although there have been requests for expansion of the culture part of the program by some non-Chinese in the school, at present the Chinese teachers only do so when they are asked to cover for a teacher. Scheduling has also been a problem; because of their late entrance to the school, regular teachers' schedules were set up and consequently finding time for children to come to the bilingual program has been difficult. One of the staff members pointed out the difficulty of structuring a coherent program around unavoidably choppy groupings of widely varying skills and interests. Since the bilingual program English component focuses on remedial and cultural support, one possibility is to explore with the SL teacher, ways of reaching Chinese students in the ESL class.

The students themselves, when asked, felt that the primary objective of the program was for them to learn Chinese and reinforce their cultural consciousness. Chinese language learning was definitely preferred over English. However, English skills were one objective of the program, and both teachers, from their use of English materials and cultural components seemed to be making real efforts to walk on both the remedial and cultural legs of the program.

EVALUATION MATERIALS:

The teacher questionnaire was answered by all but one of the staff members. Teacher responses varied from terse one-liners to highly articulate comments and suggestions.

Generally, the needs expressed were in training and materials. Three fourths of the responses indicated that teacher-training was inadequate. Areas noted as desirable were materials development, Urban Education, Chinese-American Studies and Chinese music. Several responses included a desire to have a teacher training coordinator.

The lack of materials was felt strongly. Many of the teachers felt that their best materials came from tax-levy classes in schools rather than from the program. A strong desire for primary level materials was noted. Many of the programs provided materials were at levels too advanced for the children. Other areas were audio-visual equipment which was ordered last year but held up by bureaucratic and regulatory obstacles, games and supplementary English-language materials. For a more detailed breakdown of responses see Appendix A-2.

Site Visit Observation Form - Appendix A-3: The purpose of this form was to gather accurate data on aspects of classroom and administrative practice. It was the evaluation working instrument. Notes on each site covered approximately two or three forms.

TEST RESULTS:

TABLE 1
Primary Level Reading Achievement by Grade
(N=11)

	Mean	SD	t
GRADE 1 (N=4)			
Pre-test	1.25	0.89	
Anticipated	1.90	.71	
Post-test	2.32	0.39	0.20 n.s.
GRADE 2 (N=3)			
Pre-test	0.93	0.80	
Anticipated	1.31	0.89	2.14 n.s.
Post-test	2.42	.90	
GRADE 3 (N=4)			
Pre-test	1,85	0.17	
Anticipated	2.05	0.31	
Post-test	2.48	0.46	5.46

P =<.05 unless otherwise indicated.

First and second grade measurement in this program both suffer from a lack of systematic measuring tools for the children's reading level. One difficulty as far as the Title I funds are concerned is the difficulty of ascertaining how far behind a non-reading child is in reading readiness- the structure of skills, concepts and abilities which are pre-requisites to to reading and writing. Additionally the few children with both pre and post scores introduce an unacceptable error factor to the comparisons.

The second grade scores are probably more accurate. However, second graders are only beginning to master reading-and these second grade scores are all low, therefore, it is impossible to say whether the MAT measures second grade actual reading levels with enough accuracy to make a judgement.

The ambiguity of primary level testing must be decided either in favor of a subjective, soft evaluation from observed data and completely oral-aural testing, or by development of a systematic, diagnostic measuring instrument designed primarily for early, non-reading grades. The lack of significance of the findings at this level should not obscure the fact that gains were made and that third graders did show significant improvement.

TABLE 2
Elementary Level Reading Achievement
(N=31)

		Mean	S.D.	t
GRADE 4	(N=7)			
	Pre-test	2.76	0.65	
	Anticipated	3.20	0.98	
	Post-test	3.86	1.50	3.15
GRADE 5	(N=9)			
	Pre-test	2.96	0.83	
	Anticipated	3.29	1.13	
	Post-test	3.39	1.39	0.47 n.s.
GRADE 6	(N=15)			
	Pre-test	3.61	1.04	
	Anticipated	4.09	1.24	
	Post-test	4.83	1.10	1.76 n.s.

Of the elementary levels, grade four scores show that the obtained "t" is significant at the .05 level of significance. Grade five showed a comparative lack of significant improvement in reading. Of the fifth graders, eight were tested in October and retested in April. The remaining ten fifth graders were all new arrivals without a functional knowledge of English in October. This extremely low fluency level of a majority of fifth graders may have brought the post-test scores down. Scores whoed only a four month gain over the seven month period. Grade six, on the other hand, fared better. All scores rose at a rate exceeding the actual time elapsed. Real improvement is shown.

A puzzling factor is that in most areas, classes were ungraded, therefore the fifth and sixth grades shared time, teaching materials and methods with the fourth graders. It is impossible with the information on hand to isolate a critical factor which pushed fourth grade scores up and fifth and sixth grade scores down. Fourth grade scores improved significantly and brought all children within two-year reading levels; fifth grade scores improved slightly but ambivalently on a random basis. The average fifth grade score is still two-years behind; sixth grade scores progressed beyond actual time elapsed and generally advanced to within two years of their reading grade level. However, the small number of fourth graders who had both pre and post tests diminished the confidence that can be placed in those gains.

TABLE 3
Secondary Level Reading Achievement by Grade
(N=49)

GRADE 7	(N=16)	Mean	S.D.	t
	Pre-test	4.31	0.80	
	Anticipated	4.60	0.88	
	Post-test	5.08	1.48	1.87
GRADE 8	(N=20)			
	Pre-test	4.40	1.37	
	Anticipated	5.03	2.13	
	Post-test	6.12	2.65	2.81 **
GRADE 9	(N=13)			
	Pre-test	4.25	1.40	
	Anticipated	4.46	1.48	
	Post-test	5.96	2.04	3.05 **

** $P \leq .001$

Junior high school scores all showed definite progress. Both the eighth and ninth grade obtained "t" are significant to the .001 level of significance. This means that the gains made were achieved under statistically more difficult conditions and therefore were noteworthy achievements. Specific breakdowns of vocabulary and comprehension pre and post tests show gains beyond the seven-month time lapse. However, because of their low initial starting levels, the post-test reading scores still do not fall within two years of grade level. Seventh grade scores, while they did not reach a statistical level of significance, showed definite improvement within the year.

Seventh graders worked in groups with older children; it is possible that much of the material used may not be at their appropriate level. However, their average grade level scores are less than a year behind that of the ninth grade. The high seventh-grade turnover rate could also affect the scores. In spite of this, improvement was demonstrated and this component has actually met the reading objectives of the program.

TABLE 4
Total Program Reading Achievement

ALL GRADES	Mean	S.D.	t
Pre-test:			
Vocabulary	3.66	1.39	
Comprehension	3.63	1.50	
Totals	3.60	1.44	
Anticipated:			
Totals	3.84	2.06	
Post-test:			
Vocabulary	4.79	2.57	
Comprehension	4.56	1.89	
Totals	4.66	2.09	7.21 **

** = $P \leq .001$

The total scores of this program taken together show major gains. The obtained "t" is significant at the .001 level of significance, a result very difficult to achieve. The average gain of the program is over a year; this has been achieved under difficult conditions. The low average grade level for this program, especially for the pre-test scores, reveals the great need existing for this type of program to help children learn to use English in the American context. Asian-American students consistently help score high on achievement tests given across the United States; with the help of this type of program. Asian immigrants, once the language barrier is overcome, may also move to become productive members of this society. Research indicates that they are the highest achieving minority in American society.

TABLE 5
Combined Cultural Achievement

ALL GRADES (N=39)	Mean	S.D.	t
Pre-test	67	18.40	
Post-test	77	14.98	4.07 **

The gains overall were on a significant level statistically, though elementary and primary levels were not. Gains at the secondary level accounted for most of the movement. However, it is strongly urged that a systematic, accurate, and easily understandable measuring in-trument be developed and used for cultural pre and post testing. The current test, a series of true-false and multiple choice questions developed by one of the junior high teaching staff, is ambiguous and difficult to understand in some places. A test group consisting of this evaluator, a Hong-Kong born graduate student in political science and statistics, and a Taiwan born business student who had received both classical and a modern Chinese education failed to score above ninety on the test.

Classroom observations have indicated that the cultural component is an effective part of the total program. Title I funds are limited to remedial programs, and the cultural component fell into limbo in many classes, especially at the primary and elementary levels. The junior high classes focused much more strongly on the cultural component. Some recommendations concerning this component are made in section five of this evaluation.

SUMMARY AND RECOMMENDATIONS:

I. The Program Should be Maintained At Planned Levels

The District I Chinese-English Bilingual program was filling a definite need in the transcient, culturally varied, and politically turbulent area it serves. The economic, social and political pressures in Hong Kong and Taiwan, combined with the easing of U.S. immigration restrictions, created a situation in which Chinese immigration into New York City will increase.

This increased immigration is felt most strongly in the neighborhoods to the north and east of Chinatown-which includes the area taken in by District I. As the students currently in the program move out, they will be replaced. The present eight bilingual sites (which will drop to six, if the two classes at P.S. 160 are placed under tax levy funding next year) are capable of taking in more children. The program will not need to expand but is should by all means be maintained at its present level.

II. Administrative Shifts to Provide for Better Classroom Support By The Central Office

There is a need for more systematic, educationally - oriented support for classrooms, especia-ly at the elementary levels. Most of the program staff are humane teachers, aware of the needs of their children and anxious to meet them. They support the program objectives wholeheartedly: all have experienced first hand the rapid shift from a Chinese to an American cultural environment and various degrees of the cultural shock which inevitably accompany such a shift. However, some feel that educational needs come second to political expediancy in the program, and feel a lack of competent administrative support. Materials and training provided by the project coordinator do not meet teacher expectations or general educational criteria. Neither teaching competencies nor material needs have been adequately provided for.

In addition to being aware of political and administrative needs, the program coordinator must be equally familiar with classroom needs, teacher competency, remedial English and specific educational needs of primary level classes. These can only be translated as specific competency and experience in classroom teaching, remedial and bilingual language education, and awareness of different currents in ethnic and linguistic education today. The current coordinator does not appear to meet these criteria.

III. Separate the Remedial, or Title I Component of the Program From the Cultural Component; Create Two Continuing Programs Under Appropriate Funding Guidelines

A. The remedial program, under Title I, should provide cultural support for the children to draw on as they learn English; to meet Title I guidelines, it must focus specifically on English language growth and development within the context of the child's individual, as well as cultural context. This program must develop remedial english materials focusing on Chinese and Chinese-American experiences. At present the material used for this are Chinese-language primers.

B. Place the cultural component under alternative funding and expand it to benefit all types of children. Some possible funding sources for this would be: Title VII - currently operating in the District with an Hispanic Heritage Program.

Title IX - a proposal has been submitted to H.E.W. to this effect.

Tax levy - this incorporates the culture and language components into the regular school structure as a regular social studies program in a self-contained whole class. This is currently being done at the Asher Levy School (P.S. 19) also in District 1 and is being considered at P.S. 160. This is, of course, dependent upon individual school principals, and can be instituted in varying levels and degrees.

This aspect of the program must incorporate all types of children Chinese, American-born Chinese, and non-Chinese. The proportion of Chinese to Non-Chinese varies. In a similar program, at the Haines School in Chicago, 50% of the children were Chinese immigrants, 25% American born Chinese, 25% other groups. The classes could teach both English and Chinese, as well as social studies. In some programs the ethnic emphasis may vary according to the children's backgrounds; in all cases, these classes enrich the schools in which they exist.

C. The curriculum as well as the children must expand to include Chinese-American as well as tridtional Chinese culture. Immigrant Chinese children must not only explore the roots of their own culture but also understand how their culture and people have developed as a part of the American gestalt, and what directions that development is currently taking. For Chinese-American students, the program will not only afford an exploration of their ancestral culture, it will enable them to investigate their own unique experiences. For non-Chinese children, who may or may not have themselves undergone a minority experience in America, the Chinese-American and traditional Chinese studies afford a means of understanding how they have helped shape the total American milieu- and therefore understand more about the United States

For all groups this expansion of the cultural component could develop insight into values, value change, cultural adaptation, and offer learnings about an ethnic heritage which is highly stereotyped and little known, except by those who experience it. Materials for this objective are available. See Appendix B.

IV. Systematic Teacher-Training Should be Instituted in Areas Dealing with Teaching Skills Determined by the Teachers Themselves, Working Towards A Program Shift to a Competency Based approach.

Essentially, the first step is for teachers, and administration to decide exactly what teaching skills they need to accomplish their stated teaching objectives. Some areas in which training might occur are:

Materials development and assessments: This is necessary in order to augment the currently used texts with English-Chinese primers, ESL tests and basic English and chinese language culture materials; games, tools and tasks, which would help achieve these goals. Another aspect might be materials development from commonly used inexpensive materials. This would entail obtaining and adapting materials already in existence to specific program objectives and needs, and assessment of materials already distributed by the program.

Other areas: Teaching assistants must be encouraged to participate and contribute to these workshops. In some cases, the workshops could be run by teachers or paraprofessionals with specific skills. For instance, one teaching assistant is a music major. She could set up the music component of a workshop.

A teacher - trainer must be designated to coordinate competency training. The T-T must be familiar with teacher competency needs and skill development in Chinese and English language and culture at all levels. If full-time funds are not available from any source, the program child-teacher ratio is low enough that one teacher could be released to act as training coordinator - hopefully on a full-time basis. This would, of course, necessitate some redistribution of staff. The benefits of having a teacher trainer in view of the present need far outweight the trouble of reshuffling staff.

V. Expansion of Outreach.

The program teacher-pupil ratio was very low and the program, could have accumulated more children easily. This will require outreach a broad program to contact parents, coordinate with ESL and remedial classes in schools which have them and a thorough review of MAT scores to find children who meet Title I guidelines.

VI. Systematic Bilingual reading diagnosis should be given all children to determine whether their reading problems stem only from their linguistic background or whether they had reading problems in both languages.

Findings must be communicated back to the bilingual teacher.

APPENDIX A-1

Staff Questionnaire for District 1 Chinese-English Bilingual Program

NAME: ____________ ______________ STAFF POSITION: ____________________

SCHOOL: ________________________

1. Please describe your duties as a member of the District 1 Chinese-English Bilingual Program.

2. Please describe the children in your program.

   With how many children do you work each day? What do you do?

3. What teaching materials do you use?

   What other materials do you feel should be added to those already available?

4. Please describe your qualifications to work in this program.

   What special training have you received as a member of this program?

   Do you feel that this training is adequate?
   Please describe any additional training that you would like to receive as a part of this program.

5. What are your objectives as a staff member of this program?

   Are you accomplishing these objectives?

6. What do you like best about this program? What are the benefits of having it?

7. If you could change anything about this program, what would you change?

APPENDIX A

Classroom site visit Evaluation:

TEACHER: ______________________ PARENT AIDE: __________________

Student Population: ____

Student Population:

Groupings?

Materials:

Interactoin: Chinese; Mandarin ____% Cantones _____% English ______%

Teacher/student:

Parent aide/student:

Student/student:

Teacher/parent aide:

Physical surroundings:

Comments:

APPENDIX A-2

Teacher Questionnaire Breakdown

1. To gather substantive input on role awareness, student population, teacher training and materials usage;
2. To find out how those people most directly involved with the children view the program and to gather their input.
3. To see how the teachers would respond to an open-ended questionnaire, which tends to elicit broader replies than closed ones.

The questionnaire consisted of seven questions and groups of questions in the areas listed above. Sixteen questionnaires were distributed by the evaluator with stamped self-addressed envelopes to be mailed directly back. Of sixteen questionnaires distributed on May 25, 1974, fifteen have been returned by June 13, 1974; all eight teaching assistants and seven teachers. The answers and comments, because of their open-endedness, are difficult to qualify.

Question 1: Please describe your duties as a member of the District 1 Chinese English Bilingual Program:

This generally evoked a response to help children "achieve learning objectives and teach English and Chinese culture," or simply "bilingual teacher". Specific objectives and duties were not given, probably because of lack of space; generally, the replies reflected an effective view of the teaching role.

Question 2: Please describe the children in your program.

Ten of the answers dealt with the children's work habits and attitudes: "eager", "want to learn", "interested in learning English". Three questionnaires described cognitive aspects of the children, "They are two years behind in reading level", "need extra work in English", two answers described children in the program. One of these also noted that the children in the program were not the group of children who needed it most.

Question 3: Teaching materials.

There was a real need for audio-visual equipment. Other needs were a wider range of texts, bilingual materials, more effective cultural materials, and recreational materials.

Question 4: Teacher background and in-service training.

All teachers possessed respectable credentials, which are described in the Specific Site Data section. Weekly teacher workshops maintained by the program were usually mentioned without comment. Ten felt that the results were inadequate and four felt they were.

Six teaching assistants and four teachers wanted to receive further training in areas covering materials development, teaching skills, urban education, cultural history, Chinese-American heritage, American culture and bilingual education.

Question 5: Teaching objectives.

These replies usually quoted the proposal. "(1) To teach English and (2) Chinese culture." Remedial content work was mentioned in ten questionnaires. Four teaching assistants felt that their objectives were to "help the teacher". Three teachers and one teaching assistant specifically mentioned helping their children adjust to American society as an objective.

Question 6: Major benefits of the program.

This elicited seven responses that it provided the children with a chance to learn both english language and Chinese culture, provided Chinese children with cultural reinforcement and helped children catch up in their schoolwork. One respondent felt that it encouraged communication between Chinese parents and the school. This question and Question 7 being the broadest, received about 10% less response than the other questions.

Question 7: If you could change anything about the program, what would you change.

This elicited a wide range of answers, both curricular and administrative. The general consensus was that the bilingual programs be more fully integrated into their respective schools, with more consistent scheduling of children, by way of earlier recycling of the program.

Curricular suggestions included separating the cultural component from the remedial, increasing the cultural component, adding ESL and having more access to a wider range of texts and other materials. Change of administrators having a Chinese music component and incorporating Chinese-American studies into the program.

APPENDIX B

Suggested Curricular Sources

A. Traditional Chinese Culture

There are several English language resource centers for elementary and secondary school materials on Chinese culture:

I. Asia Society
112 East 64th Street
New York, New York

II. Focus on Asian Studies
Service Center for Teachers of Asian Studies
Ohio State University
29 West Woodruff Avenue
Columbus, Ohio 43210

Although these centers are all in the U.S., they coordinate both primary and secondary English language curricula from the U.S., Taiwan, and China, and could help narrow down the search for materials appropriate to the particular age level. In addition, other Chinese-English bilingual programs must be approached for information on materials.

B. Chinese-American Studies

This is still a relatively undeveloped field, particularly at elementary and middle-school levels. References and materials, especially audio-visual materials, are available from:

Chinese Historical Society
27 Eldridge Street
New York, New York 10002

Warren Schloat Productions of West Nyack, New York has a series of filmstrips, classical and modern Chinese art, poetry and three-reel set on ethnic minorities, including Asian-Americans, appropriate for upper levels.

C. Remedial English

Remedial English materials for Chinese-speaking children in an American context are still hard to come by. The most productive method might be to contact such groups as the San Francisco Chinatown Bilingual Program, or the Chinese Bilingual Program and community groups about materials they have developed and/or are using.

There are also some excellent games for listening and learning, which have been used successfully with Chinese-speaking children learning English; some of them are:

Listening Aids Through the Grades (190 Listening Activities), Russell and Russell, Teachers College Press, Teachers College, Columbia University, New York.

Reading Aids Through the Grades (300 Developmental Reading Activities), Russell and Karp, Teachers College Press, Teachers College Columbia University.

Language Learning Activities, Bereiter-Englemann, B'Nai B'rith Anti-defamation League, 315 Lexington Avenue, New York, New York 10016 (an introduction to language learning by disadvantaged, non-English speaking children, games, reading readiness, counting, singing, and general pointers).

Mad Libs, Price, Stern, Sloan, Los Angeles, California, 90048. A language game for vocabulary and parts of speech, demonstratably successful with Chinese, Spanish, American Indian and White, remedial group.

Scholastic Scope: Scholastic Magazine, 902 Sylvan Avenue, Englewood Cliffs, New Jersey 07632. An excellent motivator for junior high children of all types. Uses games and puzzles, mysteries, for reading motivation. A weekly magazine. The same group also puts out Word Puzzles and Mysteries, with games which can be easily transferred to mimeosheets for use by individual children.

In addition the teaching staff should exchange ideas, and materials on a regular basis, as well as having systematic communication with other Chinese-English bilingual programs in New York and throughout the country.

SECONDARY BILINGUAL PROGRAM

Program Description

Introduction

The Secondary Bilingual Program was designed to meet the educational needs of Spanish speaking students in District I, Manhattan. The program provided instruction in major course areas in Spanish while teaching English as a second language. Puerto Rican and Hispanic history and culture were an integral part of the program's curriculum. Students were integrated into the school wide program by attending art, shop, music and other minor subject classes with other students in the school.

In a school district where over 70% of the pupils are Spanish speaking and more than half of the secondary level pupils are classified as non-English or having very little English competency, it can be seen that many students would enter conventional English speaking junior high school classes with a variety of learning difficulties. Many pupils enter these schools as non-readers of English and some as non-readers of Spanish. Because so many students have experienced learning difficulties, they have also begun to develop negative attitudes toward school. From this population the program selected its participants.

Sites

The program was conducted at three of the district's junior high schools. The program was approved September 6, 1973, and it was given authorization on October 9, 1973. The operational date was 9/10/74. Junior High School 22, Junior High School 60 and Junior High School 71 were the host schools. Each school housed three classes, one in grade seven, one in grade eight and one in grade nine. The class size varied from school to school; some classes were as small as 15 pupils while others were much larger. The program served a total of 240 pupils of Hispanic background.

Staffing

The project was administered by the bilingual coordinator who also had the responsibility for an Elementary Bilingual Program. In-service training was conducted by the teacher trainer who had specialization in English as a Second Language. His responsibilities were the training of teachers and aides by providing weekly workshops and making regular visits to each school. On these visits he observed classes, conferred with teachers and facilitated communication between the teaching staff, program administration and the schools. The teacher trainer provided assistance in various curricular domains, although his main area of concentration was in training and strengthening the ESL component of the program. Each school had three bilingual regular subject teachers that were also responsible for an official class and one ESL teacher responsible for the entire program. One teacher in each school served as a liaison between the program coordinator, teacher trainer and school teaching staff. The program was also serviced by educational assistants who were assigned to each teacher so that each subject class was serviced by two adults. Each educational assistant functioned as an additional instructional person in the classroom by assisting in the preparation and presentation of materials and in the assessment of classroom instruction.

The twelve teachers who staffed the program had varying types of certification. The types of certification were distributed in the following manner among the teachers:

6 were working with certificates of competency in Hispanic Culture

1 was working with an intern license

5 teachers had regular licenses

The educational assistants were all bilingual district residents with high school diplomas. Almost all teachers were of Puerto Rican or other Hispanic background, some of whom have attended mainland schools. This common background has been cited by the coordinator as providing great strength to the program. The educational experience gave the student and teacher another common experience. Here teachers could use this experience to provide insight into resolving pupils' problems of adjustment, attitudes toward school and language acquisition. The Hispanic teacher also provided positive role models for students to enhance the program's goal to develop positive self concepts in the students.

The lines of authority for the program ran from the community school superintendent to the Title I coordinator to the bilingual coordinator who had administrative oversight for the program. The bilingual coordinator's duties included:

1. Supervision of the assistant bilingual coordinator for the Elementary Bilingual Program
2. Evaluation, planning and development of program materials
3. Supervision of the teacher trainer

Materials

Materials used in the program were regular published texts in Spanish used in schools in Puerto Rico, Spain and Latin America, as well as English texts used in United States schools. Because pupil needs varied in scope, materials had to be adapted in several ways. Remedial materials not available in Spanish were translated from English. English language materials of interest to adolescents were simplified linguistically to take second language proficiency and reading level into account. Teacher knowledge and expertise were used in generating materials for the cultural component of the program.

Student Population

Selection of students for the program was based on a predetermined set of criteria. The screening process was designed to select those pupils in greatest need, that is those pupils with the lowest reading and math scores on tests standardized in English as well as those students who spoke no English. Non-English speakers were selected because they could not function in an English speaking classroom. Participants were selected from the following types of students:

a. Spanish dominant children of Hispanic background

b. Language-deficient children of Hispanic background

c. Children deficient in conceptual development and learning skills that were of Hispanic background.

Thus recent arrivals to the United States as well as long term residents of Hispanic background were serviced by the program. The 240 pupils were therefore all of Hispanic background.

Since the past school year was the first time this program included ninth graders, both the teaching and administrative components of the program became involved in attempting to provide more student information to the high school. The staff was involved in defining and describing the means by which student progress, language needs and student academic program suggestions could be recorded, communicated and acted upon by the high schools. Thus information was compiled by the staff for each ninth grade pupil into an academic profile containing test scores, grades and anecdotal records of achievement that were then sent on to the high schools. Later ninth grade pupils were accompanied by a staff member to their selected high schools where the high school ESL teachers assessed pupil English language competency. The teacher that accompanied the ninth grade pupil then consulted with the ESL teacher and guidance counselor at the high school to provide a complete history of the pupil and suggest the appropriate academic placement for the student. However there is no guarantee that suggestions made by the program will be implemented. There is no way for the program to make academic prescriptions or monitor their implementation at the high school level.

Curriculum

Official class teachers had specialization in a subject. They provided instruction in the subject area to all three classes in the school. Classes were not self-contained and taught but rather each grade moved as a unit to meet with program teachers for designated subjects. Each school had four bilingual teachers-three bilingual teachers with specialization in a subject area and one English as a Second Language (ESL) teacher. The three official class teachers provided the core of instruction in major subject areas for all participants by each teaching a specific subject to all three grades while the ESL teacher met with each class for one period a day. The ESL teacher also provided additional tutorial sessions for those students in need of special help.

The course of study generally followed the traditional junior high school curriculum. The major subjects were taught in Spanish and minor subjects were taught in English. Minor subjects were not offered by the program and these were the subjects that offered the students the opportunity to relate to the schools' non-program personnel and student body.

Although the program format followed the traditional junior high school curriculum and organizational design, the intent of the program followed its own unique goals. Thus, to meet the diverse needs of the student body, basic skills acquisition were provided in Spanish and English. Both remedial and content areas were offered in Spanish and English. Oral Spanish enrichment and Puerto Rican and Hispanic culture were essential components integrated into the program to provide developmental continuity in both language and conceptual domains. Most importantly the cultural and enrichment component along with teacher responsiveness provided the stimulus to generate positive self awareness. It was a program consensus that positive self concept would aid in establishing better attitudes toward school and academic achievement.

Procedures

A. Achievement

The major objective developed for this program was that pupils participating in the program would make significant gains in reading achievement in their first language. This skill was measured by the Interamerican Series reading tests which were administered so that pretest and posttest scores could reflect gain in reading ability. Data obtained from testing was then analyzed using the "t" test on all sample data to determine if differences in scores were due to chance scoring or if in fact the increase in scores was due to improvement.

B. Interviews

Interviews were conducted on several occasions with the program coordinator and the teacher trainer. The coordinator was interviewed before testing and classroom observations were begun in February, 1974. At this time the coordinator discussed program goals and was given an opportunity to suggest areas of inquiry to be included in the classroom observation instrument. After initial observations were concluded the teacher trainer met with the evaluator on several occasions to discuss the interim report and program implementation strategies. The coordinator was again consulted in June, 1974 to discuss the final evaluation and program directions.

The evaluator conducted informal interviews with pupils selected randomly from classrooms being observed. Open ended questions were asked regarding their participation in the program, their attitudes about not being in English speaking classrooms and their overall impression of the school.

During open school week parents of program participants that came to confer with teachers were interviewed. Parents were asked to describe the pupil performance and attitude toward the program. They were asked to describe their experiences with program personnel and non-program personnel.

C. Observations

Observations were conducted throughout the evaluation period from February 1974 to June 15, 1974. Each grade was observed in at least two class sessions and each program teacher was observed one or more times. The observation period consisted of the entire class period. The evaluator observed and recorded throughout this period. Recorded information included linguistic composition of the pupils in class, teaching style, material utilization, language usage, and a description of the physical plant. A copy of the observation instrument will be found in the Appendix of this report.

Results

A. Achievement

Pupils in the program were tested with the Interamerican Series reading tests in Spanish in grades 7, 8 and 9. Table 1 below contains the results of 7th, 8th and 9th grade pupils in the program.

Table 1 Achievement in Spanish Reading for Secondary Grades

		Pretest		Posttest		
Grade	N	Mean	S.D.	Mean	S.D.	t ratio
7	23	30.09	12.73	34.91	13.71	2.31*
8	6	33.33	17.32	43.67	20.13	2.80*
9	7	29.14	17.06	53.57	15.78	4.49**
Total	36	30.44	13.68	40.00	16.58	4.48**

*$p \leq .05$ **$p \leq .005$

Gain for all grades were statistically significant. All grade samples showed improvement with the greatest improvement occuring in the 9th grade sample. When total scores are compared with those of the previous year, the 1974 sample is superior in reading performance. Table 2 below compares scores for 1973 and 1974 participants.

Table 2 A Comparison of Total Mean Pre-test and Total Mean Posttest Scores for Interamerican Reading Test Results for 1973 and 1974 Program Participants

Year	Mean Pretest	S.D.	Mean Posttest	S.D.
1973	26.6	14.9	32.7	17.2
1974	30.44	13.68	40.00	16.58

Variability between scores in the same tests is of similar magnitude so that it can be concluded that the 1973 and 1974 samples are comparable. 1974 scores in both pretest and posttest are greater, indicating that the program not only maintained but also improved the level of instruction while expanding services to include more pupils. Because of the budget freeze initial testing was not begun until February, 1974. It would be reasonable to assume that the growth in reading achievement was probably much greater than is reflected in the data presented in this report.

B. Interviews

Parents interviewed at school visits expressed support for the program. The general consensus among those interviewed was that school visits in the past were associated with teacher complaints of student failures. It was felt by those interviewed that through its open door policy, the program had helped to diminish this attitude. Parents felt that teacher conferences were now based on discussion of student needs and progress.

Students interviewed understood the purpose of the program. Many expressed the feeling that they could approach the teachers in the program to discuss problems that could not be discussed with other teachers.

C. Observations

Classroom observations revealed that many classes in the program were still being housed in inadequate cramped quarters. Classes were being conducted by teachers with instructional assistants aiding in correcting work and helping individual students. Most classes were conducted with the whole group of student participating and a few classes were observed involved in committee and individual research work. Puerto Rican culture and history were taught in social studies classes. There was no evidence of "language mix" used by teachers. When students used non-standard language forms, teachers listened respectfully and provided an appropriate alternate means of expression in their response to the student. It was evident that there was great respect and concern for student needs. Teachers encouraged students to rely on themselves by having students initiate their own means of problem solving.

Lessons observed exhibited prior planning. However these relied very strongly on text materials. Since a whole group approach was used most often, the needs of all students were not always met. It was evident that many teachers lacked experience in adapting materials to meet needs of students who lacked the appropriate skills required in textbook assignments. Students who had mastered the appropriate skills showed interest in lessons.

Summary

The Secondary Bilingual Program has completed the second year of operation. It was designed to meet the special needs of Spanish-speaking pupils in District 1, Manhattan. Instruction in the major content areas of the curriculum was conducted in Spanish, and English was taught as a second language. Puerto Rican and Hispanic culture was included as an integral part of the instructional program. The program was conducted at J.H.S.22, J.H.S. 60 and J.H.S. 71. Each school had three classes, one class at each grade level. The program served 240 pupils of Spanish background.

The program was successful in improving the Spanish reading achievement of its students. The program was able to maintain the level of skill acquisition established by its participants in the first year while increasing its services to include more pupils.

Interviews with parents of program participants showed that they had high regard for the program and supported program efforts. Pupils interviewed and classroom observations showed friendly relationships with teachers in an informal atmosphere.

Classroom observations showed that there was a great diversity among student abilities and levels of achievement. Classroom activities and teacher efforts could not always meet the needs of this diverse student group. Teacher dedication and concern was always demonstrated.

The diversity of student abilities indicated that there were needs to which the program had been unable to address itself. These needs were teacher training in pedagogic techniques and the establishment of a class for those students that needed intensive work in elementary skills.

Recommendations

1. It is recommended that teachers be trained in assessment of specific skills such as reading and mathematics so that specific performance objectives can be devised and monitored for all participants of the program.

2. It is recommended that a full time curriculum coordinator be hired to adapt appropriate materials and to create curriculum relevant to the needs of the pupils. It is also

recommended that the program establish a non-graded class at each school where students lacking the most fundamental skills will be placed to receive intensive individualized instruction until such a time as they are ready to move into the regular program. Thus regular program teachers can concentrate on enhancing and developing the knowledge base of literate pupils.

3. It is recommended that a policy be devised so that parent support is channeled into the program.

4. It is recommended that the program be given the backing necessary so that academic prescriptions for participants entering high school will be honored at the high schools to insure that these students will continue their academic growth.

5. It is recommended that this program be refunded.

APPENDIX A

Date: Time:
School: Teacher: Subject:
Number of Students Present:
Other Adult(s)____________________ Title of other adults______________
____________________ ______________

I. Dominant language of students:
(number)
English______________
Spanish______________

II. Classroom

1. Describe physical space:

2. Exhibit of student work?
   Describe content:

3. Describe classroom exhibits:

4. Describe materials dealing with Hispanic culture:

5. Describe materials dealing with Anglo-American culture:

6. List text and other materials used:

III. Classroom organization

1. Describe how learning groups are organized:

2. Describe teaching approach used: (e.g. one teacher, team-teaching, tutorial, etc.)

IV. Language of Instructional Content

1. List content area(s):

2. Describe language of teacher and/or other adult:

3. Describe language of pupils:

(Use following descriptors for IV2 and IV3: Spanish, English, Half Spanish-Half English, Mixed sentences, Alternation - translation of each sentence, Spanglish)

V. Cultural and/or Bicultural Aspects of Lesson

a. History, Geography, Sociology, etc.
b. Science, nature, ecology
c. Customs, foods, social structure
d. Interpersonal behavior: jestures, verbal and non-verbal behavior.

VI. Interpersonal Aspects of Instructional Style

1. Teacher and/or other adult provide pupil with the opportunity to answer questions, and share experiences?
2. Is there positive contact/regard between teacher/other adult and individual pupils?
3. Does the teacher encourage going to/and using other pupils as resource persons?
4. Does the teacher encourage going to/and using other adults as resource persons?

VII. Teacher regard for student

1. Describe teacher/adult response to pupil initiating interaction:
2. Describe how teacher/adult responds to pupil's language mixture:
3. Describe how teacher responds to pupil disruption of lesson:

VII. Instructional Style

1. Describe the extent of planning/preparation of lesson? (Lesson plan in evidence?)
2. To what extent did lesson lay foundation for further inquiry? - Was it through questions, an assignment or independent work?
3. Was there use of the pupil's background/experiences for the purpose of comparison, as a point of focus, or as a point of departure from lesson? -Which?
4. To what extent or how effectively were teaching aids used? List which used.
5. Does the teacher show the ability to adapt material to different ranges of ability?
6. Is there any attempt at individualization of instruction?
7. Describe how the teacher/adult monitor student response, correct work or adapt assignments:

IX. Student Response

1. Did students question or make inquiries regarding lesson content or general subject matter?

2. Did student questions show ability or interest in probing into divergent areas or into varying levels of the issue discussed? Describe:

3. Were students interested?

PARA-PROFESSIONAL TRAINING UNIT

Program Description

Goals

The Paraprofessional Training Unit is designed to provide training for all Title I paraprofessionals for all Title I and State Urban programs in the district. The Training Unit is a continuing program from previous years and was formerly known as the Auxiliary Educational Career Unit. The training program was carried out with the intention of supporting more effective classroom reading and improving the basic skills of the pupils in the priorities of bilingual education, reading and mathematics. This program was intended to supplement the regular school program by providing necessary supportive services in the classroom through the use of individualization and small group instruction in the above stated priority areas.

There were approximately 277 paraprofessionals serving in the school district's Title I, /SEA programs. They were selected from the poverty area on an equal basis, are parents of the target children in the area, and show abilities to work with pupils who are educationally disadvantaged and are deficient in reading and mathematics. They are encouraged to use their bilingual skills to provide special assistance for bilingual children where applicable.

The proposed purposes of the training program were:

a. To train the paraprofessionals in educational techniques which would help them to be effective, supportive personnel for classroom teachers through facilitating planning for instruction, individualizing instruction, and increasing adult awareness of the needs and learning styles of children.

b. To create a possible pool for the recruitment of new teachers.

c. To reduce racial and cultural isolation by bringing people of diverse ethnic and cultural background together.

d. To develop an instructional team relationship whereby each person would know that she had a vital role in the education of children and where the acceptance and appreciation of this role would generate a feeling of being involved, valued, and committed through encouraging them to pursue a career ladder program.

Sites

School District I has approximately 11, 995 public school children who come from low-income families, the majority of which are two or more years below the national norm in reading as measured by the MAT and other standardized tests. Over 65% are below the 4th level on the State PEP tests in reading or below the minimum language competence. The ethnic composition of the district is 70% Puerto Rican, 15% Black, and 5.5% Oriental.

The schools participating in the program and the number of paraprofessionals in each is presented below in Table I.

TABLE I
The Number of Paraprofessionals in Each School and Program

School	Reading	Math	Bilingual	Uplifting Skills	Pre-K	Total
PS 4	7	1				8
15	11		5	2	1	20
19	6	1			2	9
20	12	1	2		2	17
34	6	1	3		2	12
61	11	1			2	14
63	22	1	1		1	24
64	25	1	3		2	31
97	14	1			2	17
110	6	1	2	2	1	12
122	8	1				9
134	6	1	1		1	9
137	7	1			2	10
140	17	1			2	20
160	7	1	3		1	12
188	19	1	3	3	1	27
JHS 22	1	1	3			5
56	1	1				2
60	1	1	1			3
71		1	3			4
*NPS	7	3	2			12
TOTALS:	194	22	32	7	22	277

* Non-public schools

Staffing

The training personnel consisted of one teacher assigned as a teacher-trainer coordinator, two auxiliary trainers and a part-time clerk-typist. The trainer coordinator worked the regular full school day and the auxiliary trainers worked the standard 5½ hours per day for 221 sessions. In addition to her duties as teacher trainer, the coordinator was to have served as a liaison between administrative personnel, pedagogical staff and educational assistants.

The teacher-trainer assisted by the auxiliary trainers was to provide in-service training to paraprofessionals who worked directly in the classrooms in the priority programs of bilingual education, reading and mathematics. Their duties consisted of conducting workshops and training sessions for all such programs.

The Paraprofessional Training Unit was approved on September 6, 1973, and authorized on October 9, 1973.

Paraprofessional duties: In previous years, paraprofessionals working for Title I programs were assigned to work in a specific classroom assisting the teacher in whatever duties were necessary. The paraprofessional worked in one classroom with a teacher who had a regular class and in general, serviced the same group of children throughout the day. This year there has been a change in the use of paraprofessionals. They were now being assigned to specific programs such as Distar, BRL, Wisconsin, Bilingual, etc. In the course of their duties, the paraprofessionals usually worked with a number of groups of children throughout the day depending on their assignment from the supervising teacher. The paraprofessionals spent most of their time in small group instruction.

Previously, the duties of the paraprofessionals were much broader in that in assisting the classroom teacher, they could be called on to work in many areas such as English, math, language difficulties, etc. Due to the current changes each para-professional's duties are now more restricted around a particular approach or teaching technique. Due to this more specialized use of paraprofessionals, the para-professionals have had to be given more specific kinds of training. This has been carried out in several ways.

For the Distar and BRL reading programs, training sessions were held on the average of twice a month by the company representatives. These sessions were held at the Grant Street Settlement House and ran from 12:30 - 3:00 P.M. In these sessions, the representatives concentrated on problems that the paraprofessionals might have in using their teaching approach. They also spent time answering questions from the paraprofessionals and training the paraprofessionals in various teaching techniques. The trainers often involved the paraprofessionals in the training by using such role playing techniques as having the paraprofessionals act as if they were the students.

For the Wisconsin Skills Program, a person was designated in each of the schools to provide training for the paraprofessionals. This duty was usually assumed by one of the reading teachers. The amount and quality of training received varied from school to school. Some paraprofessionals participated in group planning in one school two times a day. This planning provided training. Others reported receiving little or no training. On the average, it was reported that the paraprofessionals were receiving training three times a week by either formal training or participation in group planning.

The Program in Operation

The Paraprofessional Training Unit had as its training headquarters a rent-free meeting hall of the Grant Street Settlement House, 283 Rivington Street, N.Y., N.Y.

There were several problems in the implementation of the program. Due to personnel freezes and other problems, the program was without a coordinator for some time. The coordinator was released in October and rehired in February. There were also some problems caused by a change in the use of paraprofessionals from previous years. Upon resumption of her duties, the coordinator was also working as an assistant to personnel.

The training unit began training sessions in February of 1974. For the paraprofessionals who were receiving training from the Distar and BRL company representatives, the duties of the training staff were mainly to inform the paraprofessionals of the time of the scheduled session and to oversee the training session. The training staff did not actively participate in the training of these paraprofessionals.

For the paraprofessionals in the Wisconsin program, training sessions were scheduled at the housing schools. The number of sessions planned was based on the degree of need shown by each of the schools. For example, in one school the paraprofessionals were receiving two brief training sessions a day from the reading teacher in the school. The training coordinator made an initial visit to this school and determined that additional training was not necessary. For schools in which the in-service training was not as thorough, greater numbers of training sessions were planned.

The teacher-trainer coordinator also spent time encouraging the paraprofessionals to enlist in college programs.

The primary focus of the program was to train paraprofessionals who worked in the elementary grades in public schools. Training was not provided the paraprofessionals in the non-public schools nor the junior high schools. There was also no training provided by the unit to paraprofessionals in the Math and Bilingual programs.

Curriculum

There was no prescribed curriculum for this program. The coordinator based her training sessions on the individual needs of the paraprofessionals. These needs varied from school to school. Some of the skills covered were sequencing, blending and word recognition. The coordinator made up work sheets which were distributed to the paraprofessionals. These work-ups could be filed by the paraprofessionals and used as references for teaching the particular skill in the classroom. A copy of some of the work sheets made by the coordinator is included in the appendix.

EVALUATION OBJECTIVES:

Due to the fact that there were so many internal changes in the implementation and running of the Paraprofessional Training Unit, (P.T.U.) the original evaluation design was not used. The objectives undertaken by the evaluator were to:

A. Ascertain whether the training unit was functioning effectively and providing the kinds of training called for in the program proposal.

B. Determine what changes could be made to ensure more effective functioning of the program.

C. Investigate the kinds of training being received by the paraprofessionals from the training unit and from other sources, and determine what additional training was needed by paraprofessionals in the district.

EVALUATION PROECUDRES:

Interviews: Several interviews were held with the coordinator of the Training Unit to discuss the administration and implementation of the program. Six schools (P.S. 4, 15, 34, 63, 110, 188) were visited by the evaluator to obtain information from principals, teachers and paraprofessionals on the training and training needs of the paraprofessionals.

OBSERVATIONS:

Several training sessions conducted by the company representatives (BRL and Distar) were observed.

RESULTS:

As previously discussed due to freezes on the hiring of personnel and other problems, the program was without a coordinator for some time. As a result, training sessions did not begin until February. The paraprofessionals in the Distar and BRL program received training from representatives of the sponsoring companies. These paraprofessionals did not receive any training from the P.T.U. The function of the unit in these instances was to schedule the sessions, inform the paraprofessionals, and in general, oversee the training sessions.

The paraprofessionals in the Wisconsin program received training from the training unit in their particular schools. Most of the schols received one visit from the coordinator with some schools receiving more visits as the coordinator deemed necessary. Paraprofessionals in the math program, and the Non-Public Schools Program did not receive training from the unit.

INTERVIEWS:

Interviews held with the principals, teachers, and paraprofessionals indicated that paraprofessionals needed additional training.

A. Paraprofessional Interviews: The need for training that paraprofessionals expressed varied with the extent and quality of the training that they were receiving in their schools. Paraprofessionals who were receiving rather frequent and extensive training from the teachers with whom they were working felt less need to receive training from the P.T.U. than paraprofessionals who were receiving infrequent and poor quality training.

The extent to which the paraprofessionals felt they needed training also varied with the particular kind of program being used in the classroom (BRL, Distar, Wisconsin, etc.). The paraprofessionals in the Wisconsin Skills Program voiced more complaints. This seemed to be due to the fact that the Wisconsin program had fewer specific guidelines to structure paraprofessional activities. Some of the paraprofessionals reported that they were often left on their own to make lesson plans or materials with no specific supervision from a teacher. In cases in which the teacher worked closely with the paraprofessional in planning lessons, providing supervision and in establishing good rapport with the paraprofessionals, these problems did not exist.

Paraprofessionals who worked in the Distar Program seemed to have fewer problems with their training. This is in part due to the fact that the Distar program is organized with step-by-step instruction for lesson implementation.

Regardless of the quality and extent of the training received by the paraprofessionals in the schools, the majority of the paraprofessionals felt that they needed and could benefit from additional training. The paraprofessionals who had received training from the P.T.U. in previous years felt that the training they received was extremely helpful in working with the children in the classroom. Complaints by paraprofessionals were of two types: some who had no P.T.U. training wanted some, and those who received some training desired more as the amount given was found too short.

Some of the paraprofessionals reported that they had been assigned to work with children who had special learning problems such as perceptual problems. These paraprofessionals had no special training for working with children with these kinds of problems and felt that if they were to be assigned children with special problems, special training should be given them.

Principal and Teacher Interviews: The majority of the teachers interviewed felt that the paraprofessionals with whom they worked could benefit from continued training from the P.T.U. Most of them reported that the paraprofessionals had received training from the unit in previous years and had benefited from it immensely. A suggestion made by several of the teachers was to have an intensive training session in September for the paraprofessionals at the train-in site. The duration of these sessions would be approximately two weeks and would be held during the regular school hours from 9 - 3. During these sessions the paraprofessionals would receive intensive training in teaching techniques and specific problem areas. These sessions would be followed up by additional training and refresher courses held on the average of once a month. Other suggestions made by the teachers and principals were:

I. Training in basic teaching skills (organizing work, comprehension skills, reading skills, techniques for holding the attention of the children and keeping discipline).

2. In order to expose the paraprofessionals to other instructional techniques, paraprofessionals in the Wisconsin program should be allowed to attend some of the BRL or Distar training sessions and vica versa.

3. The paraprofessionals should be informed of the training session at least one week in advance.

SUMMARY:

The P.T.U. as functionin now, actively trains only those paraprofessionals in the Wisconsin Skills Program. The paraprofessionals in the Distar and BRL programs were receiving training from representatives of the sponsoring campuses.

It is recommended that the training unit return to the kind of training format used in previous years. All of the paraprofessionals in Title 1 funded programs should receive training from the unit in addition to any training they may be receiving from the companies or from the classroom teachers. In addition in September, an intensive training session should be held lasting approximately

2 weeks during the regular school hours of 9-3 and housed at the training site.

RECOMMENDATIONS:

Although the training received from the paraprofessionals from the company representatives was very valuable and necessary, it is felt that the paraprofessionals would benefit from training that deals with general classroom problems in addition to that which deals specifically with the use of a particular program package. Although the company representatives gave valuable services the training of the paraprofessionals should not have been limited to the kinds of training given by the companies.

It is recommended that the training given by the companies be considered as a supplement to the training that the paraprofessionals should regularly receive from the P.T.U.

In order to provide a more integrated and coherent training program for the paraprofessionals, it is recommended that the paraprofessionals be given an intensive two week training session in September to be followed by monthly training and refresher sessions. This would allow the paraprofessionals to have a better grasp of an array of techniques that can be used as problems arise in the classroom. These sessions would be held at the training site.

It is recommended that the training paraprofessional receive in the schools be continued. This would provide the paraprofessionals with solutions to problems that arise daily in the classroom that cannot be postponed until monthly training sessions with the P.T.U.

For paraprofessionals in the Wisconsin Skills Program, it is recommended that a manual of skills and teaching techniques be compiled and distributed to the paraprofessionals in September.

For the non-English speaking paraprofessionals, it is suggested that voluntary classes be established for those paraprofessionals who feel that they need additional coaching in English skills. Additionally knowledge of community resources for learning english should be made available to them.

In order to encourage paraprofessionals in their career ladder program, the training unit should give assistance in planning their educational coursework. Thus, educational guidance would be an additional duty of the coordinator.

Paraprofessionals who are assigned children with special learning problems such as perceptual problems, should receive additional training working with children with these kinds of problems. This may be done by having the coordinator of the Perceptual Skills Center set up several training sessions.

It is suggested that the auxilliary trainers be given more of an active role in training the paraprofessionals.

It is recommended that the program be refunded with the above recommendations incorporated.

HOMEWORK HELPER PROGRAM

Program Description

Sites

Homework Helper Program was assigned to PS 19, PS 61, PS 64, PS 160, PS 188, JHS 56 and JHS 71. These five elementary schools and two junior high schools were chosen on the basis of numbers of children reading two or more years below grade level and their accessibility to all children in the district who were Title I eligible in public or non-public schools. The host schools themselves were to provide five classrooms and a secure office-supply room for the master teacher at each site. Additionally, PS 19 was to serve as the administrative center for the program and provided an additional office and storage room for that purpose.

The quality of **the** physical arrangements of the sites varied from the excellent facilities observed at PS 19 and JHS 56 where the five classrooms assigned were well lit comfortable rooms, without undue hardship caused by distance from school entrance to site classroom to the barely adequate facilities observed at PS 64 where only two classrooms were observed in use in February, 1974 requiring overcrowding. When the site was observed again more rooms were used but the distances between classrooms and the office necessitated constant patrolling in the case of the master teacher in the interest of security At the final extreme was the site at JHS 71 where the cafeteria was used often with more than one tutor at a table working with one or more students.

The issue of security, never far from the minds of parents, teachers and students in the city, made a visible impact on the functioning of the program. Most schools had all entrances locked. Thus access by the coordinator, auxiliary trainer or evaluator was hampered often by the necessity of having to disrupt a program by having one of the tutors or the master teacher, himself, wait for the arrival of one of the former only for the purpose of unlocking a door. While such a practice may have the beneficial effect of discouraging tardiness, it would seem that it imposes a rather harsh atmosphere on an educational enterprise.

A second aspect of the security issue was manifested in the physical arrangements of some of the sites themselves. PS 188 and PS 64 were both observed to have long, angular and poorly lit corridors. Given the current "state of [illegible] mentality" and the memories of all too real incidents which have occurred in schools, there was the necessity for constant hall patrol in some schools. While these environmental factors are noted, it must also be noted for the sake of perspective that these features are not unlike the factors which confront the students and staff in their regular school programs and are not known to have any serious deleterious effects on academic functioning. Their affective outcomes if any, have not been examined. In conclusion, it can be fairly stated that the physical appointments for the program were for the most part adequate or better than adequate to meet the educational tasks at hand.

Staffing

The program was allotted the following staff lines:

1. Coordinator
2. Auxiliary Trainer
3. Master Teachers
4. Educational Assistants
5. Secretaries
6. Tutors

Coordinator: The coordinator's duties were to administer personnel operations, secure materials, set and administer program policy and participate in program evaluation. He was observed personally selecting the Master Teachers for the program and initiating lines of continuous communication with them. There was a necessity to select two new master teachers during the current year and the coordinator negotiated with host school principals to select people on the basis of familiarity with the objectives and operations of the program and the strength of the recommendation they were sent with. At the next level the coordinator was personally involved in, or provided administrative oversight for the selection of tutors. Such factors as ethnic balance and second language competencies were most tactfully considered and dealt with. A most important quality observed in the coordinator was his sensitivity to personality styles among all levels of his staff.

The coordinator was aided in the selection of materials by the eleven year history of the program and the combined and seperate lengths of teaching experience evidenced in his staff. Most materials, new or old, had at some time been previously tried by either the coordinator or some member of his staff. He was thus able to make selections on the basis of that experience. Each site visited was observed to be well stocked with supplies. The Coordinator also conducted workshops where among other things, feasibility of use of different materials was explored.

Policy for the program had been set previously and with an experienced staff needed little re-definition. The coordinator, however, was always available and answered any questions in a knowledgeable manner. Additionally, an outside agency was observed requesting the cooperation of the Coordinator in establishing a similar effort. His suggestions were knowledgeable and meaningful. The coordinator establish reporting systems which were then delegated to appropriate levels for implementation. Feedback was another goal of periodic staff meetings. Suggestions were usually heard with a great deal of fairness on the part of the coordinator.

Prior to the start of the program the coordinator met with the evaluator and was informed of the design for the current year and suggestions made the previous year. Shortly thereafter, a second meeting was held with the staff to discuss the same material. A schedule of data collection was devised and a system of observation agreed upon. The coordinator accompanied the evaluator on all visits to sites and got and responded to feedback that grew out of observations made at each site. He was found to be honest and open in his responses to questions raised by the Evaluator.

Overall the coordinator was found to have discharged each of his assigned duties with exceptional ability, commitment and tact. His knowledge of the program, of the personnel and even of the individual students and children and adults in the community at large had made him a real asset to the good functioning of the program.

Auxiliary Trainer: The auxiliary trainer had general charge of paraprofessionals and acted as administrative assistant to the Coordinator. Her duties were to collect and distribute materials, process tutors and pupils and provide supervision and training of paraprofessional personnel. While observed doing all of the above, she was most frequently helpful in registering pupils and getting tutors processed. Because of the effects of the freeze, this task took on special importance last year because of the large number of tutors who had to be hired after the freeze. There was a particular necessity to recruit and process students with specific language competencies, i.e. Spanish or Chinese. This task was accomplished largely due to her efforts. Another of the tasks she was observed doing quite competently was payrolls for the entire staff. Problems were solved as expeditiously as possible largely due to her personal efforts. Because there was an experienced corps of educational assistants who by and large were employed in their host schools during the day, little was needed or given in the way of training for their paraprofessionals. The scope of her other tasks however, more than justify the time allotted for her activities.

Master Teachers: Each site was assigned a master teacher who had administrative oversight for the school. All were experienced teachers and most had a long association with the program. Master teachers were observed supervising and training tutors, assigning and providing education prescription for students and selecting materials for use in particular sites. While all were observed to generally pursue these activities, some had particular strengths which were observed. The master teacher at JHS 71 had gathered and devised a home made program in reading over the years. Diagnostic tests were administered each newly arriving student by the tutor. The results of those tests were then discussed with the master teacher who then made assignments in specific reading skills where this was required. Thus, exercises in blending, comprehension and other areas were given each child based on this well designed program. The master teacher at JHS 56 placed great emphasis on tutor selection and training exhibiting sensitivity and insight into the all important aspect of tutor-student interaction as the crucial variable in this program. At PS 61 the master teacher had conferences with tutors on other than the prescribed days to give immediate feedback on teaching methodology. The master teacher at PS 188 was observed placing great emphasis on the affective nature of the learning process in his school. Recognizing in a different way the cogency of the personal interaction of tutors and students, he attempted to increase tutor awareness of the affective dynamics operating in the educational encounter. This has resulted in some innovative approaches to learning due largely to the master teacher providing the kind of atmosphere where tutors felt free to open up themselves to teaching as a personal encounter as differentiated from teaching as social role.

The competencies and experiences of the master teacher ranged from classroom teaching to counseling to being a reading specialist to being a Dean. The range of experience in the program varies from none to ten years with the average being well above five years. The usual level of activity on the part of master teachers was found to be high. The commitment was evidenced usually in each teacher knowing where each student and tutor were educationally and personally.

Educational Assistants: Each site was assigned two educational assistants. The educational assistants were to assist master teachers in facilitating instruction, recruiting and registering students and perform attendance monitoring. The activities and competencies of the educational assistants varied greatly. The first duty of facilitation of instruction varied from an affective intervention observed at JHS 56 when the educational assistant gave a reluctant student a healthy dose of "Tender Loving Care" to actual tutoring observed being done by an educational assistant at PS 160. The level of mathematical instruction done by the educational assistant observed at JHS 71 would do credit to a high school math teacher.

All educational assistants were seen engaged in maintenance of records, display and distribution of educational materials and to some degree working with individual children or tutors. The role of an educational assistant as a community person and presenting a mother-figure in a learning environment is more often than not portrayed well in this program.

Secretaries: The program was assigned one secretary for the Administrative Office and one secretary per site. The secretary in each site worked two hours per week for the program. These secretaries were to perform the clerical functions for the program. The secretary was observed at JHS 71 and seemed to be efficiently handling some of the paper-work that the program required. The secretary in the Administration Office was observed to type all correspondence, memoranda and reports. She also did telephone duty and assisted in preparations of reports. On the basis of the observations noted then, it appears that the secretaries have fulfilled their functions.

Tutors: The program was allotted fourteen tutors for each of the seven sites. Tutors were either high school or college students in their first two years. Because the effect of the program is to increase academic achievement of both students and tutors, the latter were not chosen for academic excellence but rather the ability to benefit from the program by having the need to improve academic functioning. Other factors entering selection consideration were financial need, local residence, seniority and ability to relate to students. Non-public school tutors were eligible as well.

The primary duties of the tutors were to work with the students academically. Tutors were observed at all sites. They were found to be ethnically, socially and academically balanced. As mentioned above, where specific language requirements were needed by students, tutors were provided with that particular competency. While tutors were to work with students on a one to one ratio, more frequently than not students came everyday instead of two days weekly and would therefore work with tutors on a two to one basis.

The effect of the freeze has had an unfortunate effect on tutor turnover. The program was authorized on 10/9/73. The freeze was imposed at the end of 10/73. At this time, fewer than half of the tutors had been processed. All who were not approved prior to that date could not be hired by the terms of the freeze. When the freeze was lifted 1/7/74, many prospective tutors had gotten employment elsewhere or were no longer interested in working. Most sites had their full complements by March and all by April. It is important to note, however that in all cases sites had lost up to half their original tutor complements as a direct result of the freeze and that at the resumption of hiring, many of the original corps had been lost and replaced.

Despite these unfortunate occurences cited above, tutors have been observed performing in an outstanding manner. Most tutors started with the students' homework as the program requires. They offered assistance and did checking. Beyond that, tutors taught reading and language skills. Using fairly sophisticated materials with varying levels of competency, they frequently reflected the level of training they had received from master teachers. A few were even noted to be imaginative and go beyond the materials and methods presented and attempted creative approaches of their own.

Tutors exhibited most interest in reading pedogogy. Master teachers were always helpful and frequently open enough to admit the limitations of the state of knowledge of the art. This then freed tutors to proceed in new directions with a good deal more confidence. Most frequently tutors were observed helping students see the logic in comprehension questions or in mastering vocabulary. Mathematics instruction seemed weakest in some respects reflecting the limitations of their own prior instruction. Since reading is the subject of greatest emphasis (and rightly so) master teacher training and tutor effort was focused on that subject.

Tutor training largely centered around reading pedogogy. The proposal for last year 1973-74 stated that tutor training was to take place once weekly. The days allotted, however, allowed for only once monthly (141 days). Apparently the change provided on Page 85 did not get reflected in the budget. Training time was thus maintained at the old level of once monthly. It was the evaluator's recommendation during the prior year and again during the current year that tutor training time be increased to at least twice monthly and preferably weekly.

Tutor attendance varied somewhat but less than student attendance and probably no greater than work attendance from any group at that age cohort. Tutors were found to take personal interests in students and strong big brothers/ sister relationships appeared to have flourished. The strength of this gram, it would appear to the writer, was in this interaction that results from the very personal encounter of student and tutor. The program's prior success is directly attributable to this interaction in this writer's opinion and the success of the current year can only be attributed to the continuing effect of that intervention.

Materials

The program has developed a wide range of materials which it has used, evaluated and sometimes discarded over the years. There are two types of materials which will be dealt with here: Para-instructional and instructional.

Para-instructional: Para-instructional materials are those which are not directly teaching materials but which are used widely in the program. The first of these is a teacher-tutor communication form. On this form, tutors request of the student's teacher information regarding academic deficiencies the student has and methods used or recommended to alleviate those deficiencies. This asks for specific information which delineates areas of needed intervention. Tutors periodically report back to teachers. Another instrument in use is the anecdotal record which each tutor maintains for each student. It lists what materials were worked on and what progress was made through use of the materials.

This is a device which enables master teachers to systematically monitor student progress and tutor teaching strategies. Both these instruments are advanced and serve as models of accountability and communication.

Instructional

On observation of sites the following instructional materials were observed on display or in use:

Barnell-Loft-Specific Skills Series

SRA Kits

BRL-Reading

BRL-Math

Readers Digest

Reading for Understanding

Skill Builders

Be a Better Reader Series

The materials most frequently observed in use were Specific Skills Series and Reading for Understanding. Most students and tutors seemed most consistently working with the students 'homework in the school provided materials. Occasionally there were teacher made materials in evidence as at JHS 71 where a teacher made program was being used.

The materials in Homework Helper are more varied than appears useful to instruction. Review and discussion of materials takes place but frequently on too casual a basis. A more systematic evaluation of these items could be done and the results of that evaluation made known to the district at large. Moreover, instruction in the use of materials appears to not be evident in tutor use of a variety of materials. This could mean either that tutors see value in few materials or have knowledge of few materials. If the latter, weekly training sessions could alleviate the difficulty. If the former, much of the variety of materials could be stored or disposed of for more profitable use elsewhere. Clearly the time has come for a decision on this matter.

Student Population

Students are at elementary and secondary levels: grades 3-6 and 7-9. For all intents and purposes these are separate populations. The nature of the deficiencies tend to be more severe among secondary students with attendant poorer motivation and too narrow a task focus.

Elementary students tend to be better motivated and have greater specificity in academic deficiency, largely due to the specificity of the school curriculum at that level. Outcomes of this division are student turnover and sporatic attendance at the secondary level and greater parental involvement and follow-through at the elementary level.

Selection procedures for both levels are identical. The mandated criteria are performance on math and reading tests, teacher recommendations, guidance referrals and past academic performance. Once the mandated two or more years deficiency criterion was met, the operational criteria were teacher recommendations, parental referrals and student self-referrals, listed in order of descending frequency. Once present, however, at the elementary level students continued to come because of what must be seen as intrinsic motivation.

Secondary level students frequently came to HHP when Regents Exams, minimal reading levels standards or high school entrance exams provided extrinsic motivation. Thus they tended to come in the middle of the year in large numbers and leave after having taken or gotten the results of the exams. Since the underlying deficiency is usually a great deal broader, motivation is needed to retain these students for a longer time period. Socials were recommended as a means of achieving this end. Done on a once monthly basis as either a dance or outing to a game, play, music or other cultural event, a contingency program could be worked out where a good number of students at each site who performed given criteria i.e. attendance or achievement would be rewarded for their efforts. It is noted that the program has certificates of merit for tutors and students awarded at the end of the program. However, what is envisioned here is a broader reward system in which greater numbers could participate. This is seen as a possible motivator for secondary students.

Curriculum

As previously noted, the curriculum for the program was primarily reading with some mathematics. Liaison was maintained with the student's teacher to follow the learning strategies operant in the student's classroom. The materials were those taught by master teachers in tutor training sessions given monthly. The objective of teaching reading and math was met.

PROCEDURES

Observations

All sites were visited at least twice: once during the first semester and once during the second semester - May, 1974. The object of the observation was to ascertain functional operation of the program, staffing, students, material and atmosphere of the sites. The nature of individual learning interactions was observed and cited above. The relationship of master teachers to tutors and staff was observed. The activities of educational assistants and secretaries were noted and reported above. Additionally a staff conference was observed. Reporting of the evaluation design for the current year and discussion of the findings of the prior year's evaluation took place. All significant facets of the program were examined by observation on two or more occasions.

Interviews

The coordinator was interviewed formally on three or more occasions: before program operation, mid-way through operation and finally in May, 1974 towards the end of program operations. Additionally informal interviews took place at the end of each site visit as he accompanied the evaluator on all such visits. The subjects of the interviews ranged from teacher and staff effectiveness to methodology to evaluation of materials. The coordinator was found open and willing to hear suggestions at all times.

Master teachers were informally interviewed on all site visits. Staff effectiveness, materials and methods were discussed during those interviews. During such interviews, individual master teacher's strengths were noted. Master teacher's style was also noted and reported above.

Educational assistants, tutors, students and secretaries were also interviewed on an informal basis as site visits were being made. Their individual impressions of the program were sought and noted. Thus, the need for maternal TLC strategies was exemplified and noted in the educational assistant at JHS 56 and the interest and involvment of parents was noted as a paraprofessional activity at PS 19. Creative teaching by use of the community and the interest of the students was noted in a tutor at PS 188.

QUESTIONNAIRES

A principals questionnaire was sent to all host school principals. It is included as Appendix A.

ACHIEVEMENT

Students' scores on Metropolitan Achievement tests in reading were compared on their 4/73 and 4/74 performances on a real v.s. anticipated design. They had to show achievement above their previous rate of learning. The significance of the difference was compared but "t" tests set at $P \leq .05$.

Tutors' achievement was compared by matching of their grade point averages of June, 1973 to June, 1974. They were required to bring report cards or transcripts for that purpose. A test of significance was applied to the observed difference setting the critical level at $P \leq .05$.

ATTENDANCE: Both tutors and students were expected to show an increase in attendance for 1973-74 over their 1972-73 attendance rates. Student attendance was measured by days attended and tutor attendance by days absent. A comparison was made by means of a "t" test set at $P \leq .05$.

RESULTS

The principals questionnaire were returned by 6 of the 7 principals. All thought favorably of the program and wanted the program refunded. Suggestions for improvement included tutor training, use of paraprofessionals for visits, increases in staff and in one case, restrictions of selection of master teachers from among host school staffs.

ACHIEVEMENT:

Students: Tables 1,2,3, and 4 below show achievement for Elementary level students:

TABLE 1
READING ACHIEVEMENT GRADE 3
(N=22)

	Pre-test		Anticipated		Post-test		
	Mean	S.D.	Mean	S.D.	Mean	S.D.	"T"
Vocabulary	2.51	0.94			3.22	0.95	
Comprehension	2.28	0.92			3.17	1.06	
Total	2.37	0.86	3.19	1.37	3.18	0.94	0.09 n.s.

TABLE 2
READING ACHIEVEMENT GRADE 4
(N=22)

	Pre-test Mean	Pre-test S.D.	Anticipated Mean	Anticipated S.D.	Post-test Mean	Post-test S.D.	t
Vocabulary	2.27	0.78			3.40	0.77	
Comprehension	2.67	0.65			3.33	0.56	
Total	2.70	0.66	3.32	0.91	3.36	0.63	0.30 n.s.

TABLE 3
READING ACHIEVEMENT GRADE 5
(N=51)

	Pre-test Mean	Pre-test S.D.	Anticipated Mean	Anticipated S.D.	Post-test Mean	Post-test S.D.	t
Vocabulary	3.53	1.03			4.24	1.13	
Comprehension	3.40	1.00			4.34	1.14	
Total	3.42	0.87	4.08	1.10	4.25	1.05	1.87 *

TABLE 4
READING ACHIEVEMENT GRADE 6
(N-42)

	Pre-test Mean	Pre-test S.D.	Anticipated Mean	Anticipated S.D.	Post-test Mean	Post-test S.D.	t
Vocabulary	3.96	1.06			5.52	2.04	
Comprehension	4.01	1.12			5.40	1.74	
Total	3.95	1.06	4.58	1.29	5.43	1.80	5.24 **

* $P \leq .05$ ** P .001

Review of the tables above suggests the following conclusions. Selection in terms of the criteria of having two or more years reading retardation varied with grades. Grade three students were more nearly one year deficient and grade six almost exactly two years. The program for the most part, selected students who exhibited some degree of reading retardation.

The second conclusion is that students exhibited growth at the elementary level. There was an eight month growth at grade three, seven months at grade four, eight months at grade five and fouteeen months at grade six. Because many of these children had been achieving with less retardation than exhibited at grades six and seven, their anticipated scores were not significantly different from their actual post-test scores. Their growth could have as likely accrued without the benefit of the program. The notable accomplishment for grade six, however, is that children have moved from being more than two years behind in reading to only

1 1/2 years behind. The effort on the part of the children to gain 14 months in 10 is worthy of special note. This finding is so significant that it could have occured by chance in less than one time in a thousand.

Achievement of junior high school students is displayed below by grade in Tables 5,6, and 7. Retardation in reading was more severe at this level.

TABLE 5
READING ACHIEVEMENT GRADE 7
(N=22)

	Pre-test		Anticipated		Post-test		t
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Vocabulary	3.88	1.43			5.16	1.24	
Comprehension	3.79	1.53			4.86	1.57	
Total	3.81	1.43	4.31	1.68	5.00	1.37	5.72 **

** $P < .001$

TABLE 6
READING ACHIEVMENET GRADE 8
(N=14)

	Pre-test		Anticipated		Post-test		t
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Vocabulary	5.14	2.05			6.34	2.48	
Comprehension	4.36	1.40			5.64	1.65	
Total	4.78	1.75	5.35	2.02	6.01	2.09	3.15 *

* $P \leq .01$

TABLE 7
READING ACHIEVEMENT GRADE 9
(N=5)

	Pre-test		Anticipated		Post-test		t
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Vocabulary	4.82	1.54			5.84	1.70	
Comprehension	4.58	1.24			5.90	1.09	
Total	4.72	1.36	5.20	1.54	5.88	1.30	6.66 **

** $P < .001$

TABLE 8
READING ACHIEVEMENT ALL GRADES

	Pre-test		Anticipated		Post-test		"T"
	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Vocabulary	3.57	1.36			4.58	1.77	
Comprehension	3.44	1.26			4.48	1.58	
Total	3.49	1.26	4.12	1.45	4.51	1.62	6.64 **

** P <.001

Inspection of tables above reveal that students read with an average retardation of three years below grade level in grades seven and eight, more than four years in all. Thus selection criteria were utmost important. The tables indicated these groups not only achieved but exceeded anticipated levels in every grade. This meant in this case that students achieved more than a full years growth at each grade level: Grade 7 (one year two months), Grade 8 (one year two months) and Grade 9 (one year one month). These results could have occured by chance in a hundred for all grades. Program effect at the secondary level was significantly large.

In summary, it can be concluded that all students had reading gains in the program. Junior high and 6th grade students had significantly greater gains than they could have had with the program. Table 8 above shows total program performance to have resulted in gains in excess of expectation.

Tutors: Table 9 below describes tutor achievement:

TABLE 9
COMPARISON OF TUTOR GRADE POINT AVERAGES FOR 1972-73 to 1973-74
(N=67)

	1973	1974	"t"
Mean	78.2	80.1	0.56 n.s.
S.D.	4.50	4.25	

Inspection of Table 9 reveals of gain in tutor achievement though the gain is not significant. The importance of this gain is somewhat obscured the numbers. In terms of a letter rating scale, the gains have moved the average tutor from a "C" average to a "B" average. While not every tutor can be expected to have been at that very significant point, those who got such a benefit (and the low standard deviation suggests that many were) were able to move into positions of choice for coordinations for college admissions and scholarships for those about to enter or already in college. The program can be said to be very successful in this respect as evidenced by the numbers of its graduates who are now licensed teachers in the district.

ATTENDANCE: Table 10 below describes student attendance and Table 11 tutor attendance.

TABLE 10
COMPARISON OF STUDENT ATTENDANCE BY YEARS 1972-73 to 1973-74
(N=168)

	1973	1974	"t"
Mean	159.8	173.2	3.12 **
S.D.	5.2	4.5	

$P < .01$ **

TABLE 11
COMPARISON OF TUTOR DAYS ABSENT 1972-73 to 1973-74
(N=35)

	1973	1974	"t"
Mean	5.2	4.3	
S.D.	2.25	2.21	0.54 n.s.

Review of Table 10 above shows that students attended schools significantly more often in the current year than the prior one. This finding is not likely to have happened around by chance. Tutor attendance measured in days absent remained with little year to year change. It is noted that the days absent measure for tutors has no meaning in college since attendance is rarely taken and seldom reported on transcripts. This leaves only high school students for comparison who missed but a few days in any case. The program seemed to have a measurable effect on students but not on tutors largely because there was little room for improvement of tutor attendance.

SUMMARY:

The program operated in five elementary and two junio high schools. While achieving gains in all schools it was significantly successful in grades five and six and at junior high school level in the latter being an achievement which is a reversal of last year's results. Moreover, the gains achieved by students were also reflected in gains for tutors. The tutor-student interactions were judged to be the significant factor in program effectiveness. Staff and supportive personnel were all found to be functioning optimally for realization of program objectives. Host school principals favorably viewed the program.

RECOMMENDATIONS:

1. Tutor training time should be increased to twice monthly or more often.

2. Reading pedogogy should be taught tutors in more systematic ways enabling all tutors not only to be exposed to available

instructional techniques and use of materials but also to be made aware of the limitations of the body of knowledge itself so that tutors could be made free to explore their own ideas for innovative techniques.

3. Math instruction should also be a point of tutor training with perhaps the help of the district's personnel and the paraprofessionals with special competence in math being rotated between schools for instructional purposes.

4. Evaluation of materials by the staff should proceed prior to program implementation and unused materials given to other programs or schools.

5. Socials should be built into the program as motivational techniques for the secondary level students and tutors. These can be parent oriented at the elementary level to provide feedback.

6. The program should be re-funded to cotinue doing a fine job.

APPENDIX A

PRINCIPAL'S QUESTIONNAIRE

One of these forms is to be filled out for each Title I and State Urban Program in your school. These questions are designed to provide you an opportunity to provide your frank and realistic evaluation of the program.

PROGRAM: ____

SCHOOL: ____________ PRINCIPAL or ASSISTANT PRINCIPAL: ____________

1. Personnel
   A. Teachers
      1. How many allotted? ____________: hired? ____________
      2. When (if ever) were all teacher lines filled? ____________
      3. What qualifications did you look for in teachers for this program?
         ____
         ____
      4. Were these met? ________________________________
      5. What were some of the personnel problems encountered? ________
         ____

   B. Paraprofessionals
      1. How many allotted? ____________; hired? ____________
      2. How did you plan to use them? ____________________
         ____
         ____
      3. Was that plan followed? YES ___ NO ___ Partially ____________
      4. What were some of the positive negative results of their involvement?
         ____
         ____
      5. In what way could their impact be increased? ____________
         ____
         ____
         ____
         ____

   C. Support Personnel
      1. List by title and function ____________________
         ____
         ____
         ____
         ____

   2. Were any above not essential to the program's operation? ________
      If Yes, list which ones ____________________________
   3. Is there a need for additional supportive personnel? ____________
      If Yes, list type ________________________________
      ____
      ____
      ____
      ____

2. Materials

Did the program require special materials? ____________________

A. If Yes, was it delivered on time? ____________________

B. Was it of adequate quantity? ____________________

C. If consultants were furnished, were they effective? ____________

3. Program

A. What were the program's goals? ____________________

____

____

B. What was your interpretation of the goals of the program for your particular school? ____________________

____

____

C. Which aspect (s) of the program was more important to your school than others? ____________________

____

D. Which aspect(s) were of lesser importance? ____________________

____

____

E. Were the major goals of the program met? ____________________

F. Statistical information

1. What was the authorization date? ____________________
2. What was the actual starting date in your school? ____________
3. How many students authorized? ____________: actual enrolled? ________

G. What is your opinion of present year program operation? ____________

____

H. What needs improvement? ____________________

____

____

I. What changes do you recommend? ____________________

____

J. In your opinion, should this program be recycled? YES___ NO____
Uncertain _________.

NON-PUBLIC SCHOOLS PROGRAM

Goals

The Non-Public Schools Program provided educational assistants to serve selected Title I eligible non-public pupils attending non-public schools in the target area. They were assigned to work in the classroom in support of city-wide directed programs to aid Title I teacher specialists in the areas of Corrective Reading, Corrective Mathematics and English as a Second Language. The objectives of the program were to achieve significant gains in reading, math, and English as a second language.

The Non-Public Schools Program was under joint supervision of the Title I District Office and the Central Director of the Office of Title I ESEA Programs for Non-Public School Children. The Title I teacher specialists were under the supervision of the Director of Office of Title I ESEA Programs of the Central Board, whereas the paraprofessionals were under the supervision of the Community School Superintendant of the district.

Sites

The Schools which participated in the program were St. Brigid, Mary Help of Christians, Our Lady of Sorrows, La Salle Academy, St. Stanislaus, St. Emeric, Most Holy Redeemer, Beth Jacob, and Yeshiva Konvitz. The program serviced students in grades 1-9.

Staffing

The responsibility of maintaining a liason between the Central Board Non-Public Schools office was assumed by the Non-Public Schools representative, a principal of one of the participating schools. Her main duties consisted of making sure that the participating schools were allotted the appropriate number of paraprofessionals and relating information concerning the paraprofessionals and their duties to the principals of the housing schools. She was also responsible for correspondence with the Central Board and the Community School Board.

There were originally eight educational assistant slots alloted for the Non-Public Schools Program, however, a recount of the eligible students increased the available slots to 12. The breakdown of the educational assistants by school and the hours worked is included below in Table I.

TABLE I
Number of Para-professionals and Hours Worked

School	No. of paras employed	Days Worked	FTE Total
St. Brigid School	1 para. 1 para. 1 para.	5 5 5	3 paras
Mary Help of Christians	1 para. 1 para.	5 5	2 paras
Our Lady of Sorrows	1 para 1 para	5 5	2 paras
Beth Jacob	1 para	4	4/5 para

TABLE I
Number of Para-professionals and Hours Worked cont'd.

School	No. of paras employed	Days Worked	FTE Total
La Salle Academy	1 para.	5	1 para.
Yeshiva Konvitz	1 para. 1 para.	1½ 1½	3/5 para
St. Stanislaus	1 para.	2	2/5 para
St. Emeric	1 para.	2	2/5 para
Most Holy Redeemer	1 para.	5	1 para.

The educational assistants worked directly with the Title I teachers as supportive personnel in the schools. Their days of assignment and the schools assigned was determined by the number of Title I eligible pupils and Title I assigned teachers in each school. The duties of the educational assistants consists of:

a. Aiding teachers in preparing materials.
b. Motivating pupils.
c. Reinforcing skills.
d. Individual and small group instruction.

The duties of the Central Board Title 1 teachers were no different from the duties assumed by District-wide Title 1 teachers for public schools.

Materials

This program bore the expense only for the paraprofessionals. No specific materials were called for. The materials used by the Title 1 teachers were no different from those used by city wide Title 1 teachers for public schools.

The para-professionals were to receive training from the para-professional training unit.

Student Population

The total register of non-public schools is approximately 3157 students of which more than 787 are eligible for Title I services. The pupils served by the Non-Public Schools Program were selected by the principals in each school from the list of those students identified by the 1973 Eligibility Survey. They not only met the requirements of residency but also of educational deprivation below minimum competency as determined by the Eligibility Survey. Only those students who were most educationally retarded in reading and math and who were deficient because of language handicaps were selected for services.

Curriculum

The curriculum for the Non-Public Schools Program was no different from the curriculum employed by Title 1 specialist teachers for the district public schools.

EVALUATION OBJECTIVES

The objectives of the evaluation design were to measure the following areas of student achievement:

A. Students will achieve more in reading english than their rate of learning prior to program intervention as measured by a pre and post test on the Stanford Diagnostic Test in Reading.

B. Students will achieve more in arithmetic than their rate of learning prior to program intervention as measured by a pre and post test on the Stanford Achievement Test in Arithmetic.

C. Non-English speaking children will score significantly higher on the ESL test as measured by pre and post tests on the ESL test.

EVALUATION PROCEDURES

A. Interviews and Observations:

Interviews were held with the Title I teachers, principals and paraprofessionals in the housing schools. Several interviews were also held with the program coordinator. Questions were asked to access program operation, see, and if possible give suggestions for correcting any problems in implementation, and to access the degree to which students seemed to be benefiting from the program. Whenever possible, classroom observations were made to see how the paraprofessionals performed in the classroom.

Data was also collected on the following variables:

1. The number of students per class.
2. The number of times per week the class met.
3. The length of the class session.
4. The ranges of class sizes.

B. Testing and Statistics

The following testing data was collected to determine whether the program objectives were met:

(a) The Stanford Diagnostic Test was administered on a pre/post test basis to measure improvement in English. The data was analyzed using a real v.s. anticipated growth design. Mean differences between post test scores and anticipated scores were compared by means of a "t" test set at the $P \leq .05$ level of significance.

(b) The Stanford Achievement Test in Arithmetic was administered on a pre/post test basis to measure improvement in mathematics. The data was analyzed using a real v.s. anticipated growth design. Mean differences between post test scores and anticipated scores were compared by means of a "t" test set at the $P \leq .05$ level of significance.

(c) The English as a Second Language Test was administered on a pre/post test basis to measure improvement in performance of non-english speaking children. Mean differences were compared by means of a "t" test set at the $P \leq .05$ level of significance.

Children in the non-public schools program were administered the pretests during the first week of September. They were post-tested during the third and fourth weeks of April.

RESULTS

I. Interviews

Interviews with the administration and staff of the Non-Public Schools Program revealed that the program was generally well run and coordinated.

A. Principals: The principals interviewed were generally well satisfied with the program and felt that the participating students were benefiting greatly from the additional services provided by the paraprofessionals. No problems with the program were reported by the principals.

B. Teachers: Some of the teachers reported that they were at first skeptical about having a paraprofessional in the classroom but after the implementation of the program, found the services of the paraprofessionals to be invaluable. All of the teachers interviewed reported that the paraprofessionals were doing an excellent job. Their instruction, classroom assistance and materials preparation. The paraprofessionals with bilingual skills were reported to be very helpful in working with non-English speaking and bilingual children. It was also reported that the skill exhibited by many of the paraprofessionals in working with children increased the rapport between the students and staff.

C. Paraprofessionals: The paraprofessionals interviewed reported that they were pleased with how the program was implemented and administered. They reported that they got along well with the teachers and staff and felt that their services were valued by the teachers and students involved in the program. Most of the paraprofessionals were experienced and had served in the program in previous years. Many of the paraprofessionals who worked in the program for only one or two days a week, donated their time on a volunteer basis on some of the other days.

Training: The paraprofessionals in the Non-Public Schools Program did not receive training from the paraprofessional training unit this year although many of them reported that they received training from the unit in previous years and found the sessions very helpful and useful in working with their children in the classroom. Although they did not receive training from the unit, the paraprofessionals reported that they received training individually from the Title 1 teachers to which they were assigned.

The only suggestion made by the teachers and paraprofessionals for improving the Non-Public Schools Program was concerning the number of days worked by the paraprofessionals. Some of the schools were assigned a paraprofessional for only 1 or 2 days a week. It was felt that it would be more helpful if the paraprofessional was allowed to work a full week or all of the day that the Title 1 teacher was present.

II. Observations:

The paraprofessionals were most often observed working with the pupils in small group and individual instruction. They also spent time in materials preparation, distributing and collecting work folders, and escort duties. Some of the paraprofessionals were assigned to work one day or a half day with the Title 1 Guidance counselor. These services were reported to be most valuable especially if the paraprofessional had bilingual skills to aid in working with non-English speaking children.

A. Classroom data: A variety of data were collected on the classrooms in the housing schools. Information on the number of students per class, the times per week each class met, the length of each class, and the range of the number of students per class was collected. The means for this data for the combined housing schools is presented below in Table 1. The data is broken down by Title 1 program, speech, corrective math, corrective reading, English as a Second Language:

TABLE 1
Combined Means for Class Site, Class Meetings, and Class Length

	Speech	Corrective Math	Corrective Reading	English As A Second Language
Mean Number of students per class	3.3	7.4	7.5	6.5
Mean times per week class met	1	1.9	1.9	2.1
Mean time length of class	36 min.	47.6 min.	45.8 min.	44 min.
Range of no. of students per class	1 - 11	3 - 13	5 - 11	2 - 10

For the Speech Program, the average size of the class was 3.3 students with a range of from one to eleven students. The class met on the average of one time per week for an average class session of 36 minutes.

The average class size for the corrective Math Program was 7.4 students with a range of from 3 - 13 students. The classes met on the average of 1.9 times per week for an average of 47.6 minutes.

The Corrective Reading Program had an average class size of 7.5 students with a range of from 5 - 11 students. The classes met on the average of 1.9 times per week for an average of 45.8 minutes.

The English as a Second Language had an average of 6.5 students per class with a range of from 2 - 10 students. The class with a range of from 2 - 10 students. The classes met on an average of 2.1 times per week for an average of 44 minutes.

TEST RESULTS:

Reading: The S.A.T. was administered by each school in the program. The results of these tests were collected and analyzed by the evaluator.

It was projected that students would significantly improve in their reading at the .05 level of significance as measured by a "t" test on an anticipated v.s. real growth design. The data from the Reading S.A.T.'s for grades 2-8 are presented on the following page in Table 2.

TABLE 2
S.A.T. Reading Achievement by Grade
(N=369)

GRADE	Pre-test Mean	Pre-test S.D.	Anticipated Mean	Anticipated S.D.	Post-test Mean	Post-test S.D.	N	t Ratio
2	1.32	0.06	1.51	0.98	2.33	0.83	88	9.15 **
3	1.94	0.48	2.26	0.65	2.84	0.92	67	5.87 **
4	2.44	0.55	2.70	0.67	3.00	0.77	78	4.70 **
5	2.85	0.63	2.98	0.70	3.77	0.75	55	5.96 **
6	3.32	1.03	3.61	1.18	4.04	1.25	40	2.87 *
7	3.98	1.11	4.29	1.23	5.07	1.30	30	4.26 **
8	3.94	1.24	4.20	1.35	4.90	1.59	10	1.75 n.s.
TOTAL	2.40	1.10	2.65	1.23	3.26	1.26	3.69	13.57 **

** = significant at .01 level
* = significant at .05 level
n.s. = not significant

The test of significance was done comparing anticipated means which is a variation of the pre-test score that has been corrected for the length of time in the program, to the post test means. A significant gain was found in grades 2, 3, 4, 5, and 7 at the .01 level of significance and at grade 6 at the .05 level of significance. The only grade that did not show a significant improvement was grade 8. This may be due to the fact that this grade only had a small number of students in the sample (N=10) and a rather large variance (S.D. = 1.59). However, of importance if the four test students gained 8 months in 7 months between testing.

SUMMARY:

The majority of the students in the reading program not only showed a significant improvement as projected in the evaluation objectives but tended to score significantly higher than projected (.01 level of significance). Only one grade which covered only 10 students did not show a significant improvement, though there was a growth in 7 months of instruction for this grade.

MATHEMATICS:

The S.A.T.'s were administered by each school in the program. The results of these tests were collected and analyzed by the evaluator.

It was projected that students would improve significantly in their reading at the .05 level of significance as measured by a "t' test on an anticipated v.s. real growth design. The data from the Math S.A.T.'s for grades 2-6 are presented below in table 3.

TABLE 3
S.A.T. Mathematics Achievement by Grade
(N=114)

GRADE	Pre-test		Anticipated		Post-test		N	t ratio
	Mean	S.D.	Mean	S.D.	Mean	S.D.		
2	1.31	0.18	1.54	0.32	2.25	0.32	25	7.58 **
3	1.94	0.48	2.28	0.66	3.06	0.42	23	6.58 **
4	2.92	0.40	3.36	0.50	4.10	0.45	22	7.86 **
5	3.85	0.55	4.36	0.65	5.04	0.55	22	5.21 **
6	4.83	0.92	5.37	1.03	6.40	0.97	22	5.89 **
TOTAL	2.92	1.39	3.32	1.54	4.11	1.58	114	14.06 **

** = $P \leq .01$

The "t" test of sifnificance showed that not only did the students in the mathematics program perform at the projected rate of improvement, they showed a rate of improvement greater than that projected. All grades improved significantly at the .01 level of significance. All but the first grade gained more than one years growth in seven months of instruction.

ENGLISH AS A SECOND LANGUAGE (ESL)

The ESL test was administered by each school in the program. The results of these tests were collected and analyzed by the evalutor.

It was projected that Non- English speaking children would improve significantly at the .05 level of significance on the ESL test administered on a pre/post test design. The results from this test are presented below in Table 4.

TABLE 4
English as a Second Language Achievement by Grade
(N=78)

GRADE	Pre-test		Post-test		N	t-ratio
	Mean	S.D.	Mean	S.D.		
2	11.33	4.41	14.90	5.03	21	4.35 **
3	14.07	6.29	20.27	5.99	30	6.42 **
4	20.47	7.46	27.60	9.23	15	6.37 **
5	24.00	6.08	33.33	10.41	3	3.21 n.s.
6	22.25	11.21	26.25	13.00	4	3.70 *
7	38.00	8.75	47.00	10.42	4	5.11 *
TOTAL	16.90	9.29	22.76	10.84	78	10.94 **

* = significant at $P \leq .05$ * - significant at $P \leq .01$ n.s -= not significant

The results show that the majority of students improved at or above the projected rate of improvement. Gardes 2,3,4, showed a significant rate of improvement at the $P \leq .01$ level of significance. Grades 6 and 7 showed a significant improvement at the $P \leq .05$ level of significance. Only grade 5 which only had an n=3 did not show a significant improvement.

SUMMARY:

The overall pattern that emerged from the evaluation of the Non-Public Schools Program was that it was well run and coordinated. Interviews held with the principals and Title I teachers indicated that they are pleased with the program and found that the paraprofessionals were of benefit to themselves from the standardized tests administered also upheld this point of view. Students showed improvement in all three tested areas of the program: reading, mathematics, and english as a second language. In many cases, the improvement was greater than the .05 level of significance projected. This gain can be attributed to the excellent work of the teachers and administrators and to the dedicated work of the paraprofessionals. As stated previously, some of them dedicated their time to the schools even on days when they did not get paid.

RECOMMENDATIONS:

No recommendations for changes are made for the Non-Public Schools Program. If possible within budget limitations, it is suggested that the paraprofessionals who are now assigned only 1 or 2 days per week be allowed to work full weeks or as many days as the Title I teachers will be present.

The program was generally well coordinated and run and it is suggested that it be refunded for next year.

Introduction

Project Math was authorized August 23, 1974, and approved 9/6/74. It was being put into operation from Sept. '73 to January, 1974 for some sites. The corrective math teachers (one from each school) who were to be paid out of project funds were not available because of budget deficiencies. These teachers came by way of Title I funds in March, 1974.

PROJECT DESCRIPTION

Sites

The Program was instituted in twenty (20) schools in District I. Of the twenty schools, sixteen were elementary and four were junior high. The schools involved were PS 4, 15, 19, 20, 34, 61, 63, 64, 97, 110, 122, 134, 137, 140, 160, 188 and JHS 22, 56, 60 and 71.

Staffing

The staff of Project Math (and Strengthening Math) consisted of the following:

one program coordinator-director

twenty-four corrective math teachers (20 in elementary schools and four in J.H.S. The four additional teachers were provided to take care of those schools which had a larger number of pupils deficient in Math.)

twenty educational assistants.

The classroom teachers and educational assistants were trained in the methodology of the BRL and Distar instructional systems in order that they might efficiently work with small groups for individualization of instruction. This was accomplished by means of a series of training sessions.

Materials

The materials used in the Project were of two kinds: a) the Sullivan materials (Behavioral Research Laboratories) and b) the Distar materials (Science Research Associates).

The Sullivan materials were used in all but four schools. The materials for the students consisted of:

1. Placement examinations
2. Readiness program
3. 37 programmed textbooks
4. A book of final examinations
5. A student's Record Book
6. An assortment of math games, concept cards, etc.

The materials for the teacher were:

1. A teacher's manual for the entire program
2. Instructions and keys for the placement exam
3. A key to the in-book tests

4. A key to the final examination
5. A teacher's grade record book
6. A large demonstration page.

The Distar materials for the student and teacher are nine books consisting of one Preskills book and Books A-D for Arithmetic I and Books E-H for Arithmetic II. There are 220 presentations for Arithmetic I, and a similar number for Arithmetic II. There is also a Teacher's Guide.

In the Sullivan system all pupils who have had previous math experience took a Placement Examination. The pupil's score on this examination placed him in one of thirty-eight levels of achievement from which point he progressed through the rest of the programmed sequence. The pupils took progress tests at the end of each half of every book, and final examinations before proceeding to the next book.

The Distar regimen requires the teacher to work more intimately with the pupil since for each presentation the Teacher's Guide directs exactly what the teacher shall do and say.

Student Population

The student target population for Project Math was selected from the twenty schools of District I using as a criterion the students' being two or more years below grade in mathematics. The pre-test scores used were the April/May, 1973 MAT grade equivalents. Using this criterion the following distribution by grades became the target population.

Distribution of Students by Grades

Grade	No. of Students
1	243
2	231
3	179
4	186
5	232
6	289
7	529
TOTAL	1,889

Most of the pupils were involved in other special programs as well as BRL.

Curriculum

Much of the curriculum was devoted to improving the computational skills of the pupils. In addition to working on programmed material most teachers included a sizable module of time for individual independent study and a module for mathematical games. In classes where such division of the class period took place there was added interest on the part of the pupils.

PROCEDURES

Achievement

The entire target population was pretested in November, 1973 and was post-tested in June, 1974. Approximately 25 percent of the students were selected as a sample and post-tested in April, 1974 in order to see what results were discernible as a result of the intensification of the math instruction. They were given a second post-test in June, 1974. The results appear below together with statistical analyses.

Questionnaires

This evaluator did not send out any questionnaires. A test of teacher mastery of the BRL program for Project Math was given to all teachers. This tested teacher knowledge of the purpose and methodology of the program.

Interviews and Observations

During the visits to the schools, this evaluator informally interviewed teachers, educational assistants and pupils. The conversations with teachers and educational assistants tended to probe the subjective reactions of these two groups to the program. An interview schedule appears as Appendix A.

Not all the questions in the interview schedule were asked of any one teacher or educational assistant. Questions 1, 2, 4, 5 and 7 were most often posed. A summary of comments and opinions expressed by teachers and educational assistants indicated the following:

1. The structure of the program was good because it gave the teachers freedom and opportunity to talk with individual pupils in an unhurried way to encourage them, motivate them and dissipate whatever difficulties the student may have had. The structure of the program materials gave the children very definite personal objectives to which they could relate and in which they could be successful. Pupils felt more at ease because the individual pupil was competing with himself rather than with classmates.

2. Teachers and educational assistants were quite aware of the opportunity for and the challenge of the "one teacher-one pupil" situation which allowed for the interplay of personalities, and also the need to isolate individual pupil's exact difficulty whether that difficulty was affective or cognitive. This was due to the many in-service workshops organized by the program director with the purpose of orienting the teachers and educational assistants in regard to the philosophy, rationale, methodology and the effective use of not only the program materials which are purely computational, but also laboratory techniques in the use of additional materials needed to fill out math education.

3. There was cautious optimism as to the possibility of the program's affecting a significant increase in pupil's competency in computation. Most doubted the persistence of a significant gain if the supportive and remedial aspects of the program were not continued beyond the present year.

Pupil response to questions such as, "How do you like the work?" or "How do you like working by yourself?" ranged from: "It's O.K." to "It's groovy" and "Far out!". Observation of pupil activity showed that activity was in general, closely related to the range of feeling indicated by the responses.

The above mentioned interviews took place at the following schools, with the persons specified:

SCHOOL	DATE	PERSONS (POSITIONS)
PS 61	March 12, 1974	A.P., Teachers, Ed. Assistants
PS 64	March 12, 1974	A.P., Teachers, Ed. Assistants
JHS 22	March, 1974	Proj. Liaison Person, Teachers, Educational Assistants
JHS 71	March, 1974	Proj. Director, Teachers, Educational Assistants
PS 60	April, 1974	Teachers, Educational Assistants Proj. Liaison Person
PS 15	April, 1974	Teachers, Educational Assistants
PS 19	April, 1974	Teachers, Educational Assistants
PS 34	April, 1974	Teachers, Educational Assistants
PS 63	April, 1974	Teachers, Educational Assistants
PS 122	May, 1974	Principal, Teachers, Educational Assistants
PS 137	June, 1974	Teachers Educational Assistants
PS 134	June, 1974	Teachers, Educational Assistants
JHS 56	June, 1974	Teachers, Educational Assistants
PS 188	June, 1974	Teachers, Educational Assistants
PS 20	June, 1974	Teachers, Educational Assistants

Results

The evaluation proposal had two main behavioral objectives:

1. Students will achieve more in arithmetic than their rate of learning prior to the Program intervention, and

2. 70 percent of Program teachers will pass a BRL Mastery Test.

In regard to the second objective, the instrument used was a test given on May 27, 1974, consisting of thirty-three items on teacher mastery of BRL materials. The Mastery Test appears as appendix B. The results are shown in Table II.

TABLE II
Responses to Mastery Test BRL Program Materials

No. of Items Correct	Percent of Items Correct	No. of Teachers	Percent of Teachers
33	100	2	8.3
32	97	10	41.7
31	94	6	25.0
30	90	1	4.0
29	88	2	8.3
28	85	2	8.3
27	---	--	----
26	---	--	----
25	---	--	----
24	73	1	4.0
TOTALS		24	99.6 or 100%

This table shows that 96 percent of the teachers obtained a score of 85 percent or higher. The cut-off score was 70 percent. Hence the stated objective was achieved.

From Tables 2, 3 and 4 the following can be deduced:

1. In each grade except Grade 7, the achieved average growth exceeded the growth anticipated if the target population had not been supported by the intensive help given them by Project Math.

2. In all grades, except Grade 7, the average improvement varied from over five months (5.4) to over nine months (9.4). Grade 7 improved only three months (3.4). The over-all average growth was almost 7 months (6.9). Excluding Grade 7 results, the average growth was 7.6 months. Thus, the average growth was more than that expected from a normal population, i.e., 6 months growth in six months instruction.

3. The greatest average growth occurred in grade 2 (8.1 months) grade 3 (7.9 months) and grade 6 (9.4 months). Grade 7 showed the least average growth (3.4 months).

4. The pre-test standard deviations for grades 1 through 6 showed that these groups were fairly homogeneous within grades. This is especially true for grade 5 (S.D. = 0.07). The post-test standard deviation for each grade showed increased, reflecting among other things, differences in rates of learning.

These results are pictorially presented in the graphs in this report.

5. Table 4 shows that in strengthening mathematics, no measurable effect occurred between the April and June testings. It is probable that the test instrument lacked sensitivity to pick up such a gain.

TABLE 2
RESULTS OF MAT MATH ACHIEVEMENT BY GRADES
(N=755)

GRADE	N	PRE-TEST Mean	PRE-TEST S.D.	ANTICIPATED Mean	ANTICIPATED S.D.	POST TEST Mean	POST TEST S.D.	t	
1(a)	66	1.20	0.24	-	-	1.50	0.56	5.92	*
2	65	1.40	0.39	1.70	0.69	2.21	0.54	6.72	*
3	96	1.82	0.60	2.17	0.86	2.52	0.77	5.63	*
4	102	2.17	0.49	2.52	0.64	2.71	0.73	3.06	*
5	107	2.89	0.07	3.33	0.84	3.68	0.97	3.92	*
6	127	3.49	0.77	3.96	0.91	4.43	1.29	4.42	*
7	190	4.19	0.97	4.69	1.13	4.53	1.06	n.s.	

A historical regression not used at this level P ≤ .001

FIGURE 1

Graphs of Pre-test Average Scores ————————————

Anticipated Average Scores - - - - - - - - - - - - - - - - - -

Achieved Average Scores . . . .

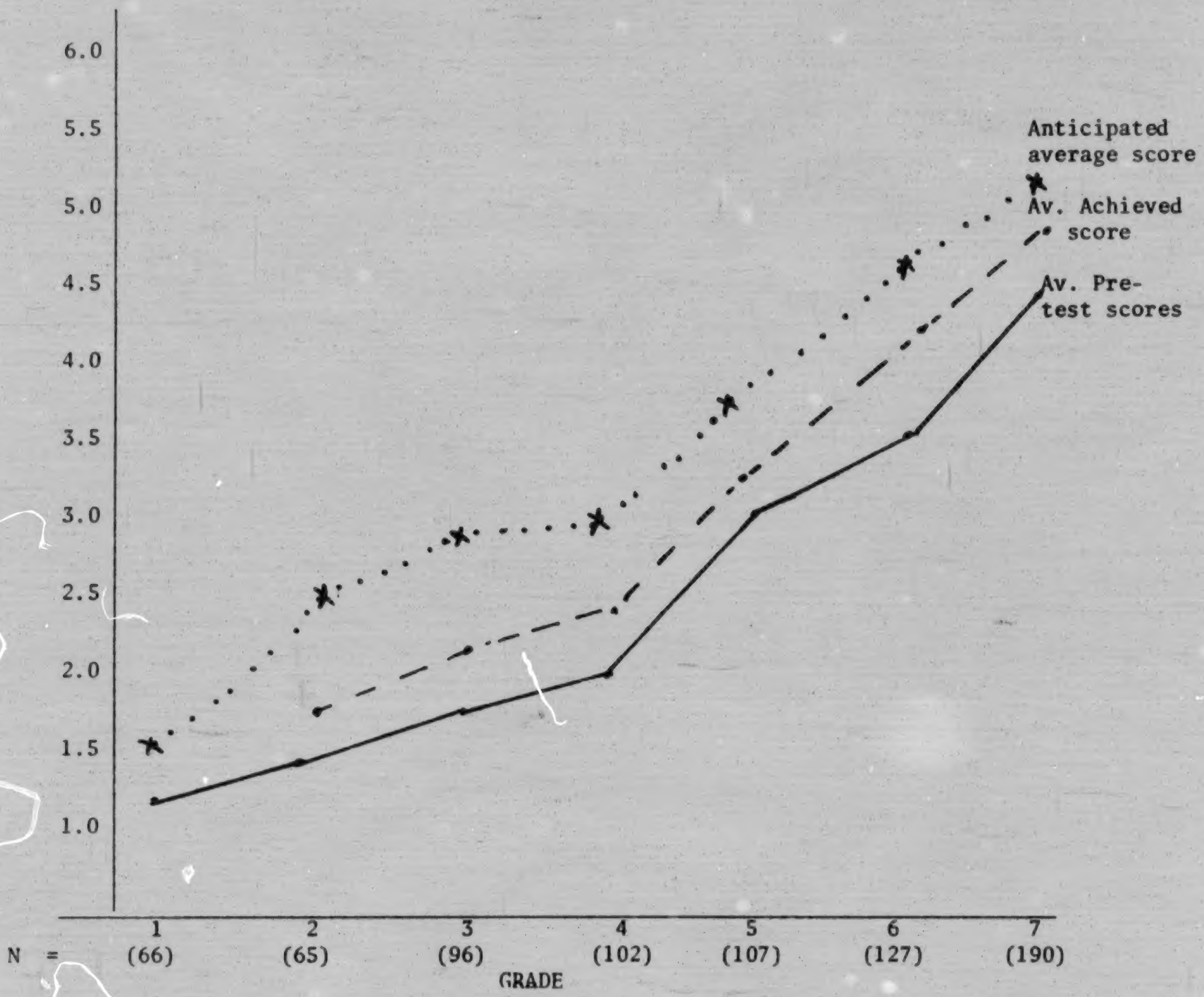

TABLE 3

Showing Average Anticipated Growth (1), (2) Average Actual Growth, Excess of Actual Average, growth over anticipated growth (3) (in hundredths of a school year of 10 months)

GRADE	AVERAGE ANTICIPATED GROWTH (1)	AVERAGE ACTUAL GROWTH (2)	EXCESS OF ACTUAL OVER (3) ANTICIPATED Col. 2 Col. (1)
1	- (a)	0.30	-
2	0.30	0.81	0.51
3	0.35	0.70	0.35
4	0.35	0.54	0.19
5	0.44	0.79	0.35
6	0.47	0.94	0.47
7	0.50	0.34	-0.16 (b)
Averages	0.40	0.69	0.34 (with 7th grade included)
	0.38	0.76	0.37 (not including Grade 7)

(a) no anticipated grade growth suggested

(b) not significant by "t" score

FIGURE 2

GRAPH: Showing Average Anticipated Growth, Average Actula Growth and Excess of Average Actual Growth over Average Anticipated Growth.

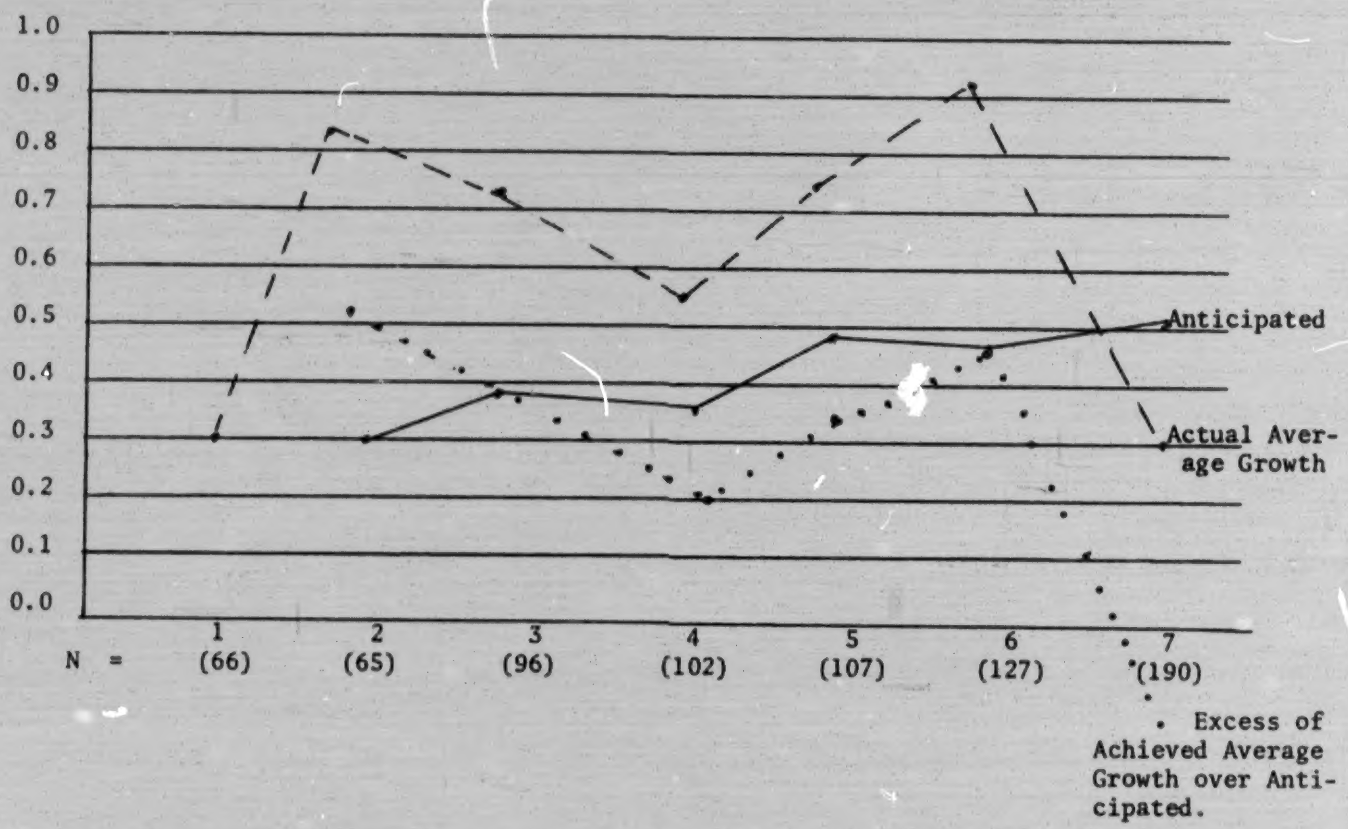

TABLE 4

Results of MAT Math Achievement for Strengthening Math by Grade (N=136)

GRADE	N	PRE	ANTICIPATED	POST	t
1	42	1.49	1.54	1.60	0.14 n.s.
2	35	1.92	1.95	2.26	0.88 n.s.
4	23	2.36	2.59	2.53	0.32 n.s.
7	36	4.43	5.07	5.25	0.27 n.s.

CONCLUSIONS:

The results obtained from a random sample of 753 pupils from the target population of approximately 1800 showed that the primary aim of the program was amply achieved except in grade seven. The objective stated that the target population shall achieve more in arithmatic than their rate of learning prior to the intervention of the program. The target population, except for grade seven, achieved an average growth of over five months, to over nine months, with an average over-all growth of over seven months (more than six months growth in six months).

In the case of the grade seven group which showed only a three months average growth, the answers to certain questions should be asked:

(a) How can we motivate older students in the junior high school, who have had so little success with mathematics?

(b) So far as the objective of the program is concerned, it is questionable if it was realistic to anticipate an average growth of five months in six months instruction from an older group three or four years behind in mathematics.

(c) Were the Sullivan materials suitable for this age and grade level? In this respect, was there difference in the mental set of pupils in elementary school compared to those in junior high school?

The Program was excellently organized and implemented. The administrative arm of each school welcomed the project and gave what cooperation was needed.

The teachers and educational assistants were quite effective in working with the different groups and individual students. The class periods ran smoothly as the pupils shifted from activity to activity (BRL material to individual study to math games).

Teachers and educational assistants thought that the Program and its objectives were a personal challenge. They quite generally rose to the challenge in their person to person contact with the students, motivating and helping them.

The teachers in the Program showed mastery of the BRL materials and the rationale and methodology of the Program. This was no doubt in part, a result of the intensive and numerous training sessions arranged for them by the Project Director and the BRL consultants.

Teachers and educational assistants were optimistic in regard to improvement of pupils' computational skills, but expressed chagrin that their efforts would be subject to evaluation by standardized tests such as the MAT after such a short period under the Program.

Recommendations

1. It is perhaps unfair to test pupils' increase in computational skill by the usual standardized test like the MAT after only a term of remediation. Such tests would have greater significance if given after a much increased period of remediation (at least two years). It is recommended that in addition, an examination similar to the Placement Exam be constructed to measure yearly or term progress of students.

2. Disadvantaged children can gain in education only in relation to changes in their total educational experiences from early childhood to adolescence. Since improvements in learning can be maintained and increased only when the program provides for a sequence of 3 to 4 years rather than one-shot efforts, it is recommended that the program be enlarged and extended to service eighth and ninth-grade pupils, since their future success in high school math is highly dependent upon their computational ability and command of concepts.

3. It is further recommended that the program be extended to include students who are below grade by as little as a half year in the lower grades, since any deficiency tends to increase the further the student advances in school grade.

APPENDIX A

INTERVIEW SCHEDULE

1. Do you feel that the project gave you an unusual opportunity to help students deficient in mathematics?
2. Do you feel that the structure of the program aids you in keeping track of the different groups and individuals in your BRL class?
3. Do you find corrective teaching more (or less) challenging than teaching the regular mathematics class?
4. What long-term results do you envision for the pupils in terms of increased computational ability, reawakened interest in mathematics, and improved pupil self-image?
5. What is your assessment of the overall reaction of pupils to the program?
6. What changes or additions to the program do you think would improve the program?
7. What problems or satisfactions have you experienced in implementing the program?

APPENDIX B

EVALUATION OF TEACHER MASTERY OF BEHAVIORAL RESPONSE LABORATORIES PROGRAM PROJECT MATH

May, 1974

The questions which follow are based on principles, materials and methods basic to the efficient implementation of BRL Project Math in District I.

Please indicate your response (T for True; F for False) in the appropriate space after carefully reading each statement.

____ 1. The primary objective in using BRL as a remediation program is the improvement of computational skills.

____ 2. Individualized instruction in math means that at no time do pupils receive their math instruction in small group or class lessons.

____ 3. Success in BRL math program is not contingent upon reading ability.

____ 4. BRL math program encourages competition among pupils in the class.

____ 5. Pupils are expected to complete each page before checking their answers.

____ 6. Placement exams are given after Grade 1 to each pupil in the program to determine where he should be seated within the class.

____ 7. Gray frames are used as models for frames to follow.

____ 8. There are 37 sequential books in the BRL programed text series.

____ 9. BRL math is used in District I as a supplement to the regular math program for pupils in need of remediation.

____ 10. BRL materials are available to each school at the beginning of the school year only.

____ 11. In teaching math concepts, the math teacher should confine herself to BRL materials.

____ 12. The Student Record Book is kept only by the student and is an exact replica of the Teacher Record Book.

____ 13. The final examination for each book is given after the pupil has taken the last progress test in the book he is using and after the progress test is corrected.

APPENDIX B cont'd.

____ 14. Already prepared duplicating masters, which can be used to provide additional practice for a particular concept, are available for all programed texts.

____ 15. There are no math problems in the BRL math program.

____ 16. Games are not considered an educationally sound aspect of math instruction and have no place in the BRL program.

____ 17. For effectiveness, BRL math materials should be used at least 45 minutes per day.

____ 18. Paraprofessionals play an important complementary role in implementing BRL Project Math.

____ 19. Math lab activities to facilitate discovery of concepts of measurement, time, etc., can dovetail with BRL math, and are encouraged.

____ 20. All pupils must begin in Book 1 and must follow the entire sequence without skipping a book, although they proceed at their own rate through the series.

____ 21. Hainstock blocks provide an opportunity for pupils to build interesting structures during brief respite from math work.

____ 22. The concept of the "missing addend" is one with which children seem to have much difficulty.

____ 23. Knowledge of place-value is necessary before pupils can understand the exchange process.

____ 24. Programmed texts are so easy to use, that no orientation to them is needed by pupils beginning the BRL program.

____ 25. Once pupils start to work in their books, the teacher is free to remain at her desk and check other work.

____ 26. You should not make a moral issue out of it, if you find that a pupil is looking at the answers before taking his responses.

____ 27. A pupil should be encouraged to "guess" the right answer instead of 'cheating' because it's more fun that way and his guess will usually be right.

____ 28. Answer keys to in-book tests and final examinations contain not only the correct answers, but reproduce the actual test pages and show all the examples worked out, step by step.

____ 29. It is desirable that pupils receive 80% or more on any test they take in the program before going on to the next book.

APPENDIX B cont'd.

____ 30. To indicate facility with the oral equivalents of numerals and signs and to turn up otherwise hidden difficulties, it is advisable to have pupils read a math problem to you from time to time.

____ 31. Pupil work habits are not important in this program . . . only that he gets through with the bock.

____ 32. The teacher should not interrupt the study session at any time even to clarify a given point or add additional information.

____ 33. A relaxed and positive attitude is desirable. It is wise to stop at each student's desk, show interest in his work and congratulate him on his progress.

______________________ Grades

______________________ School

______________________ Name

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Director PROJECT MATH

WORK-STUDY READING AND MATH PROGRAM

Program Description

Purpose

The purpose of the Work-Study Reading and Math Program was to provide academic remediation in reading and math to junior high school students. An incentive for continued school attendance was provided in paid work experiences which were to provide meaningful tasks to be performed by the program's participants in Title I programs in the district schools. Authorized in 2/7/74, the program ran until 6/30/74.

Sites

The program was in each of the district's four junior high schools: 22, 56, 60 and 71. Some schools had specific for all or part of the day (60 and 71). Another (22) had no adequate space for continuous gatherings and a third used an administrator's office (56). It is a tribute to the district that all schools are being used to capacity and that programs abound within schools. Nevertheless, an ad hoc physical arrangement for any program, especially one which attempts to reach high risk students, operates with a certain handicap. While it is recognized that the program is designed to supplement, not supplant the normal activities of the student's curriculum, it appears that the simple amunities provided by a regular meeting place that was not subject to interruptions said something to the individual student about the school's commitment to the program.

Staffing

The staffing of the program consisted of the following persons:

1. Coordinator
2. Teachers
3. Educational Assistants

All had been hired by March, 1974.

Though unmentioned in the proposal, the Work-Study Program was one in which there was a great deal of administrative involvement on the part of the home school principals. In almost all cases there was a high degree of commit- on their part and an ongoing interest without which functioning of the program would have proved much more difficult.

Starting with authorship of the program, the principal of JHS 71 should be given full credit for initiative in writing the original proposal. He participated in selection of students and gave direct administrative oversight to the program. The principal of JHS 22 took the same kind of responsibilities for selection and direct oversight. At JHS 56, the principal delegated oversight and day-to-day management to the assistant principal who proved not only capable but creative as well and who provided a resource to other schools additionally. The dean at JHS 60 worked with the principal in daily management of the program after the principal had taken personal charge of selection and program design for that school. Thus it can be seen that in the case of Work-Study, principals have taken a great deal of responsibility and given much personal involvement.

Coordinator: The coordinator was hired and began work on 3/19/74. Experienced as a teacher, he had training in guidance and was immediately able to establish rapport with students. As specified in the proposal, the coordinator's duties were to provide guidance services, supervise work sites, relate work assignments to careers, arrange for trips with occupational significance and provide a career education input into the curriculum. Hired in March the Coordinator had to take on complete organization of the program at JHS 22 where such factors as adequate space never were solved. This organizational task took place for all of April. It was only during late April and early May that the coordinator was able to regularly service the program as a whole. In so doing, he provided some guidance activities by holding rap sessions with each of the school's participants. At JHS 22 he provided much more concentrated guidance services by holding more regular group meetings and successfully placing two students in special programs for high school. Supervision of work sites by the coordinator was most evident at JHS 22, where again he had most direct responsibility. Principals of host schools were met with and difficulties resolved. When the principal of PS 34, a feeder school for JHS 60 rejected Work-Study participants, the principal's grievances were heard and thus made for better implementation next year. When the principal of PS 15, a feeder school for JHS 56 was met with by the coordinator he was found to be well pleased with the program's participants and could see growth in personal responsibility on the part of the children in the relatively short time of the program's implementation. The District Librarian was involved in the program by the coordinator and was reportedly well pleased with the results and suggested plans for expansion as well. Thus on the basis of positive reports the coordinator could be said to have provided over-all supervision of work sites and could further be shown to have demonstrated initiative and creativity as well. The coordinator was most able to relate work assignments to careers in JHS 22. However, he was aided in this task by the Title I teachers assigned of other schools. While it is difficult to relate a meaningful career to sweeping a floor or walking a hall some attempt was made when tasks were more meaningful, as most often they were, to a real job in the real world. An outcome of that could only be more information as the research suggests that children are not ready to select occupations at grade 9. However, the need to be aware of the necessity for planning was present and the coordinator aided by teachers promoted that awareness.

The proposal's mandate to the coordinator to arrange for trips was apparently not reflected in providing car fare. While this takes on less importance, as children begin getting paid for their work assignments, it did present an insurmountable problem at the beginning of the program, largely due to lack of time after his organizational duties were completed. However, there was a cultural trip suggested by the evaluator which the coordinator indicated would be subsequently followed-up on.

The matter of providing career input into the curriculum was most frequently used by the Title I teachers without benefit of outside resources. These activities will be explained in more detail below. The coordinator had insufficient time to do much about curriculum input during the current year though more is planned for the following year.

The coordinator's posture must be seen as active. He met with each school's participants. He met with the teachers and administrators of the host schools twice weekly since April. He maintained contact with each site by written or verbal communication. The evaluation process was supervised by him and data collection implemented by him personally. Without the personal effort of the coordinator, it is doubtful that JHS 22 would have had a functioning Work Study Program. He implemented suggestions such as personally dispensing pay checks to establish and reinforce his identity to the program's participants, planning a trip and planning inter-site ball games for the current year. Moreover, the coordinator has shown initiative involving the district's librarian in finding appropriate tasks for students. He can be said to have more than adequately fulfilled the requirements of the position.

Teachers: The program was originally assigned ½ teacher per host school who was to rotate between schools each day on an AM/PM basis. In most cases other arrangements have been made. At JHS 71 the principal kept his Title I teacher and also supplemented him with a tax-levy teacher as well. At JHS 60, the Title I teacher spent three days in that school and the remainder of his time at JHS 56 which then also had a ½ teacher. JHS 22 had no Title I teacher as it was agreed between 22 and 71 that sharing would be fruitless. Of abundant clarity is the fact that sharing Title I teachers did neither host school much good. The programs cannot work on an alternating basis as all children work better with major subjects in the morning and particularly those children experiencing low achievement. Thus the hope that some schools would have major subjects in the afternoon was in vain.

Teachers were charged with providing instruction in the "basic priority skills", presumably reading and math. Both these subjects are specialties which are taught under separate licenses at the junior high school level. Remediation in these areas is even more difficult since a deeper knowledge of the learning process and available strategies is necessary in each area. The use of available Title I reading programs-Kottmeyer and reading labs - and math programs such as BRL and math labs supplemented to a large extent. Thus children at JHS 56 got HILC for the 7th grade and Kottmeyer for the 8th and 9th grades as Title I supplements. The services of the teacher mentioned above were largely for math though a Title I math lab was also available. JHS 22 provided the services of their math lab and the Title I supplement. JHS 71 provided BRL Math and Kottmeyer. JHS 60 provided the services of the Title I teacher three days weekly. He had reportedly been given assistance by the school's reading specialist and math specialist.

The Title I teacher for JHS 56-60 was interviewed and observed. He recognized and felt the weight of the total responsibility for remediation of so many children who were so far behind. Upon observation, there was some evidence of planning but an unfortunate tendency to reward calling out in class by giving personal attention to those students while students who quietly raised their hands didn't seem to get as much attention. Nevertheless, it must be stated that the observation at JHS 60 did show that learning was taking place and had been taking place as evidenced by students conforming to a set routine. The teacher indicated that he had tested children with a teacher made diagnostic instrument to assess math skills needed. He taught to those skills, though there was little evidence of individual prescription in this relatively small group of 15-20 students. The teacher, however, went beyond the scope of his instructional duties and visited work sites as well as JHS 56. He took responsibility for providing guidance services to the children and taught such career skills as filling out applications for jobs. The rapport observed was one of warmth reflecting the genuine interest the teacher had in each student.

The teacher at JHS 71 was also observed and interviewed. He was found to be most creative. He invested much in role playing as an instructional technique. Thus children were observed learning social studies by preparing for roles as lawyers, judges, defendents and even informed observers. Students also reportedly role played interviews. At the suggestion of the principal and under the supervision and guidance of the teacher the students painted their own room. The teacher agreed that this presented a good organizing factor for group identification among students. The teacher at JHS 71 also took responsibility for visiting work sites and providing supervision in the area as well. Though he reportedly often needed help from the principal, he became more autonomous as the term progressed.

Both teachers appear to have discharged their duties well. They provided for effective growth in a program whose students were selected at least in part for poor school adjustment. For future planning, it is suggested that the seminars be held in which available specialists get an opportunity to apprise teachers of available strategies for teaching the under-achieving learner. Moreover, program wide faculty meetings could at least share the pool of knowledge that exists among individual staff members including paraprofessionals.

Paraprofessionals: Each host school was allotted one paraprofessional whose duty it was to assist the teacher in the instructional component of the program. Paraprofessionals were observed at JHS 22 and 71 and interviewed at the latter. There was no paraprofessional at JHS 60. Paraprofessionals had the soundest feeling for the students, having been chosen primarily for their familiarity with the neighborhood and knowledge of the kinds of pressures and strengths of the students who participated in the program. The para-professional at JHS 71 was observed helping students get their working papers processed, serving as a liaison between the school and student's parents as well as following up work sites to see that students were on task. His effectiveness was perhaps typlified in an incident where an unstable student who had threatened a teacher was stopped and disarmed before arriving in the school. This prevented what could have been a criminal assault on a teacher. The program at JHS 22 was immensely helped by the efforts of the paraprofessionals in getting students working papers and social security numbers as well as doing work site visits within the school.

Paraprofessionals have provided much of the affective input into the program. Their further involvement in planning motivational activities and learning strategies could improve program functioning for the coming year. Some method of providing feedback to the teachers in a non-threatening and supportive manner could be explored in training sessions for all staff members. Their input should begin in all schools at the student selection level as it in fact did begin at JHS 71.

Materials

The materials for this program were those used in Title I reading and math programs available at the secondary level. BRL math is a sequential math program stressing computational skills. JHS 71 used this program. BRL math is designed for the 7th grade only. However, since many students lack the computational skills needed in simple mathematical operations, this program could be of use to most students. An additional program which deals with life-skill or work application type problems might also be useful. The math labs at JHS 22 and 56 dealt in some ways with these problems though the approach they used seemed more motivational than task oriented. In the absence of available commercial packages, the teachers together with the math chairman can devise some instructional materials which could teach basic math concepts and arithmetic operations. Because of the history of failure, programmed texts if found at the right level and appropriate interest levels could be most desirable.

Kottmeyer was used at JHS 56 and 71 for reading remediation. This reading program has been criticized elsewhere for its inappropriate subject level and lack of interest for secondary level students. There is no reason to believe that it was more successful here. The bulk of materials was an added difficulty of this program. The High Intensity Learning Center was one of two reading labs introduced this year in the district. HILC was reportedly used at JHS 56. Reading laboratories have been used with success by adult learners attempting literacy. Under proper use, there is reason to believe that the multi-modality, specific-skill approach these laboratories used could be successful in teaching secondary students. Their individual nature allows for progress that is unhampered by odious comparison. It is recommended that Work Study make greater use of reading labs in all programs.

Student Population

The proposal allotted each school 30 students evenly spread across grades 7-9. Actual enrollments varied somewhat as described in Table I below.

TABLE I
Enrollment by Schools

School	Enrollment
22	23
56	33
60	30
71	22

Enrollment varied from high of 33 at JHS 56 to a low of 22 at JHS 71. Variations in enrollment were due to pupil attrition, feasibility in terms of allotted space and group mix in terms of the psychodynamic functioning of the groups.

Selection procedures as mandated by the proposal included teacher and guidance recommendations, test scores and cumulative records. Using the initial criteria of deficiency in reading and math and teacher referrals schools differed in how final selections were made. At JHS 60, final decisions were made by the principal and dean jointly using prior adjustment as the final criteria. At JHS 22, the coordinator made final recommendation using the prospective student's assessed likelihood of cooperation with the ends of the program as the final criteria. JHS 71 used all the criteria in the proposal and added two others: previous unsuccessful attempts at remediation and ability to mix in the group, very much like cooperation at JHS 22. The principal and paraprofessional made final selections based largely on the final criterion after the others were fulfilled. JHS 56 used all criteria and also relied on the affective as the final criteria. It thus appears that student's ability to function in a group and be open for attitudinal change became the most crucial criterion once all others were met. Given the aims of the program the saliancy of that criterion is not unreasonable.

Of passing interest is the sexual mix of the program. JHS 60 was all male, JHS 71 had one female and JHS 56 and 22 were both co-educational. Conceptually, much could be said for a coed student group since sex roles tend to be inhibitory to acting out behavior. As a matter of fact, this evaluator's observations tended to find that the deportment of students at 56 and 22 was a bit more mature than those of the single sexed groups at 71 and 60. The effect however, was minor compared to the real growth noticed among all students observed over the duration of the program.

There was diversity also in the grade levels of the target population among host schools. JHS 60 included no 7th graders as the principal felt them too immature and felt the older students could benefit more. JHS 22 on the other hand had only 7th and 9th graders on the coordinator's rationale that those entering or leaving junior high school needed most help. JHS 71 and 56 had all grades but the former had more 8th graders on the rationale that this group was bo[illegible]y mature and would provide a nucleus around which a program could [illegible]d in the following years. Grades selected did not appear to make [illegible]ant difference in performance in this evaluator's opinion on the basis [illegible]vation.

Curriculum

Students were to have their major classes with their regular classes and minors for Work Study. That is approximately what occurred. The amount of integr[illegible]he regular school program varied from very little at JHS 71 to very [illegible]HS 56. The program also called for remediation by means of Title I [illegible]s. That was described above. The extent of use of Title I materials varied from much at JHS 56 to little or none at JHS 60. The curriculum for the program was the regular school curriculum plus remediation. The results of these efforts will be discussed in the Results Section below. The effectiveness of materials were discussed above.

Of interest to the curriculum of the program was the role of the youth leadership project in Work Study. Students at JHS 71 were involved in groups at YLP on a regular basis. There was involvement at JHS 56 as well. The affective input of that program must be seen as very positive in the change of attitude noted among many students. A recommendation for the next year is a more regularized input of YLP into the program for all students.

Work Program

Table II below shows the students enrolled by school, number of percent of those then working and number of sites where working:

TABLE II
Students Working by School and Number of Sites

Schools	Enrolled	No. Working	% Working	No. Work Sites
22	23	11	48%	2
56	33	30	91%	5 + D.O.
60	30	22	73%	4
71	22	13	59%	4 + D.O.

D.O. = District Office

The mandate of the program is that students will be working in Title I programs in schools. Table II above shows the program to have been successful in that regard. Students were employed exclusively in host schools as at JHS 22 or in feeder schools as at JHS 60 or at host schools, feeder schools and the district office as at JHS 56 and 71. Feedback has been positive from feeder school principals, district office personnel and host school administrators.

Work tasks varied greatly from janitorial assistance to filing, to giving medical screening examinations. Many students were called upon to do hallway monitoring in feeder schools. This activity appeared trivial to many students. Others helped with cleaning graffitti from school walls. While this appeared real, it had little career significance. Of more interest and innovation were some efforts on behalf of the students at JHS 56 where the assistant principal had established contact with the District Health Coordinator who trained six students to do health screening for the district. They did height and weight measurements and other screening techniques ordinarily left to gym teachers in the schools. The success of the program merits a suggestion for expansion next year. Through the efforts of the coordinator, the District Librarian was contacted and students were placed in school libraries in the district. That effort resulted in great enthusiasm on the part of the librarian, resulting in many libraries being fully ordered for the first time. That effort also deserves expansion for the next year.

The restriction to work in Title I efforts seems unduly stringent. If students could get an opportunity for mechanical experience in or our of school, much could probably be learned and career horizons expanded. Greater planning and creativity is required to make work experiences more meaningful for every student next year.

Procedures

Observations

Classes were observed at each site. The purpose of observation was to ascertain class size and composition, the nature of student-teacher-paraprofessional interaction, pedagogical techniques and use of materials. All were described above under appropriate headings.

Interviews

The coordinator was interviewed formally on three occasions: at the beginning, middle and towards the end of the program. The initial interview was to assess his view of the problem and plans for working with the program. During the middle interview, an attempt was made to gather information for the Interim Report on the outcome of his plans. Suggestions were made at that time for a broader scope of activities which were followed up by the coordinator. At the final interview, the functioning of the program at each site was discussed and figures gotten for enrollment, work participation and average attendance. Final arrangements for data gathering were also made. The coordinator was at all times helpful, revealing and open to suggestions.

Administrators were interviewed a minimum of twice and sometimes more often. The assistant principal at 56, the principal at 71, the principal at 22 and the principal and dean at 60 were all interviewed around planning, implementation, and outcome of the program. All were helpful, took personal responsibility for their programs and were pleased with the outcomes. Cooperation on their part individually and collectively was unsurpassed by that given any other program in the purview of this evaluator.

Both of the programs' teachers were interviewed to assess their perception of their roles and the difficulties of their work conditions as they saw them. Both were helpful, open to suggestions and had suggestions of their own to make. The teacher at JHS 60-56 suggested provision of one teacher per school instead of the shared time plan now in effect. The difficulties of teaching both math and reading was also discussed. Both teachers were felt to be creative and genuinely interested in their students as indicated above.

The paraprofessional at JHS 71 was interviewed. It was learned that he had initiated much of what was done well at that school. Some of the persistent problems he felt that remained were basic immaturity of some students. His input was found insightful and helpful.

Students were interviewed as a group at JHS 60. While they generally liked the program they regretted the fact that girls were not enrolled. They wanted trips and basketball games between schools. They seemed generally satisfied with their jobs though the custodial chores were not well liked. Most felt the program helpful and seemed to want to accept greater personal responsibility for themselves. As a group they were self-corrective and seemed to have a very positive tone. They articulated well and seemed generally and genuinely "turned on" by the program.

A questionnaire was sent to each of the junior high school principals.

Reading Achievement:

Students were expected to show a significant increase in reading as measured by the Metropolitan Achievement test as administered in February and May, 1974. Difference were measured by a "t" test at significance level .05.

Mathematics Achievement:

Students were expected to show significant increases in mathematics as measured by the Metropolitan Achievement Test as administered in February and May, 1974. A "t" test was applied to the differences and was at significant level .05.

RESULTS

Questionnaire:

Three of the four schools responded with completed principals' questionnaires. Suggestions for improvement which come from the questionnaire were earlier program implementation (SEPTEMBER), tighter administration of the program and funding for special equipment and trips. All were of the opinion that the program should be recycled and thought it worth having in their schools.

Students were administered the MAT in Reading in February and again in May, 1974. The results of this testing and are displayed in Table 3 below.

TABLE 3
READING ACHIEVEMENT TEST RESULTS
(N=59)

	Pre-test	Anticipated	Post-test	t
Mean	4.92	5.08	4.99	1.08 n.s.
S.D.	1.73	1.80	1.52	

As is indicated above there was growth for the students of about one month. As students ewere supposed to be selected on the basis of two years or more deficiency, the pre-test score indicates that the selection criterion was apparent. This, however, implies a historical achievement rate of about five months in each ten months of school. Students had three months between testings which would imply a 1.5 month gain. The fact that students did not achieve a full month gain accounts for the lack of significance of the test of the differences between the anticipated and post scores.

Reviews of possible under-achievement are the following: Diversitivity of the knowing process, shortness of time between testings, and the standard error of the tests themselves. As to the first point, diversity of learning is contained to the research or learning which indicates means of no growth followed by periods of rapid growth. Shortness of time between tests support the possibility of student breakdown and discussed performance in the force or repeated functions. The literasist suggests this possibility. Finally, the exam of measurement of the MAT at this point is about four or approximately four months of growth. Thus any given mean can be seen as an approximate of actual achievement within a four month range above and below the actual score. Therefore, an exported increase of 1.5 months is beyond the sensitivity of the instrument since an individual above is expected to vary by as much as four months normally.

In conclusion, there is no evidence of significant reading achievement on the basis of the instrument tested. It is suggested that the MAT lacked the sensitivity to measure what could have been real gains. Finally, it is important to note that though lacking significance, gains were made in reading achievement by students in the program.

Mathematics Achievement:

Achievement in mathematics was measured by means of the Metropolitan Achievement Test in Mathematics which was administered in February and again in May, 1974. The results are displayed in the table below.

TABLE 4
MATHEMATICS ACHIEVEMENTS TEST RESULTS
(N=44)

	Pre-test	Anticipated	Post-test	t
Mean	5.16	5.32	5.23	2.20 n.s.
S.D.	1.41	1.19	1.18	

Inspection of Table 3 reads that there were some mathematics gains. Student gained an average of one month. The pre-tests show that while students were two or more years deficit in math their deficiencies were not as great as they were in reading.

The pre-scores for mathematics implies something more than a half yearly historical growth - more nearly 5/8. This then demands a more higher anticipated score which tends to wipe out the difference between the pre-test and post-test by showing little significance in the difference between what the children actually scored and what they probably would have scored, for the benefit of the program.

The reason for questioning a lack of achievement has been stated above in the section on reading. The same reasoning applies for the mathematics scores.

SUMMARY:

The Work Studies Program was a half-year program that was to provide both remediation and work experiences for 120 youngsters at the junior high school level. It was implicated in able of the junior high schools in District One with modest success. Most students were given jobs and most of the jobs were seen as relevant to cover development of the students.

Principals both of host schools and proctor schools had much participation in program functioning within schools. The coordinator was imaginative and very involved with program operation. Teachers were committed though unfairly asked to do remediation beyond any individual teachers' competence. Academic achievement gains were modest. Affective growth on the part of students individually and collectively were considered great.

RECOMMENDATIONS:

1. Planning with student participation, for more relevant field trips. New York City is a large commercial center offering employment in every type of office skill. The community in which District One is located has many small businesses often operated by properties of the same ethnic background as the children. Opportunity for material explanation by paraprofessional visits should be initiated.

2. The changing of Title I teachers was ill--conceived. One teacher per school ia a minimum requirement for this program. Moreover, the teachers should be increased in either English or mathematics. Since it is not reasonable to expect a remediation person in reading or math, if the teachers have some acquaintance with the general area, they could better implement suggestions made by the reading and mathematics remediation specialists as well as develop their own methods.

3. Teacher training in diagnostic - prescriptive institutions. In order to make this feasible, an instructional package will have to be available for the teachers, EDL, BRL Math programs. Teachers should be given training in assessment of individual abilities of students and startegies for intervention with particular learning problems. This recommendation is made with full knowledge of the relative newness of this.

4. In consensus with the recommendations above, greater use of EDL and High Sensitivity Learning Center equipment should be utilized. These approaches have been successful in teaching people with remediation problems largely because of their self-pacing and multi-modality approaches.

5. The Youth Leadership Program in the historical part has been having a quiet but substantial success in working with children. By approaching children outside of classroom on an affective level they have probably been responsible for the emotional materialazation of a number of the district's children. This program's involvement with Work Studies children should be encouraged.

6. The districts supportive services; health services, lunch programs, district offices themselves - all can and should be expanded for active competencies in establishing meaningful work experiences for children.

7. The program should be refunded for a full year. State Urban finding under occupational education might be explained.

UPLIFTING SKILLS CENTER PROGRAM

Goals

The Uplifting Skills Program was designed to improve reading performance in grades K-6 by early identification and remediation of perceptual deficits and to improve specific reading skills of the most educationally and economically disadvantaged pupils who were two or more years retarded in reading. The development and planning of the proposal for this program was done in conjunction with the Community Superintendent, the Community School Board, representatives of the Principals Advisory Council, the professional district staff and the District Parent Advisory Council on Funded Programs. As outlined in the proposal, the program was set up to satisfy the following needs:

a. Identify perceptual deficits in order to provide immediate remediation in the early grades.

b. Provide consultant services in perceptual techniques to schools and teachers lacking these services.

c. Improve reading performance in all grades, especially grades 3 - 6 which average two or more years below level according to the most recent MAT scores for District One.

d. Train and encourage teachers in setting up similar reading skills centers to aid their own target pupils.

Sites

The Uplifting Skills Program is an outgrowth of a program initially started under the Experimental Elementary program at P.S. 110M. The two functioning units of the Uplifting Skills Program, the Perceptual Skills Unit and the Reading Skills Center, were retained after the Experimental Elementary Program was dismantled, using P.S. 110 as a model center for other programs to be developed in the district.

As mentioned previously, the Uplifting Skills Program was composed of two components, the Perceptual Skills Unit and the Reading Skills Center. The Perception Unit was located in only one school, P.S. 110 and began operating in September 5, 1973. The Reading Skills Center was housed in three schools, PS 110, PS 188, and PS 15. The dates that the Reading Skills Centers began for the various schools are as follows: PS 110, September 5, 1973; PS 188, October 4, 1973; PS 15, December 6, 1973. The program operated five days a week during the regular school hours from 8:40 AM to 3:00 PM.

Staffing

The staff of the Uplifting Skills Program consisted of one teacher-trainer who also served as program coordinator, four teachers, and seven educational assistants.

The program coordinator was responsible for overall administration of the program. She was required to maintain a daily log of her activities and to submit a monthly progress report to the district State Urban Program office. The duties of the teacher-trainer coordinator were as follows:

a. Providing for orientation of staff, parents, principals and teachers of the housing schools regarding the philosophy, objectives, and the contents of the program.

b. Coordinating the implementation of the diagnostic testing procedure of the reading needs of pupils on grades 3-6.

c. Working directly in the classrooms to assist the teachers in meeting the individual needs of their pupils.

d. Conducting reading laboratory classes and training teachers and educational assistants in the use of various techniques.

e. Acting in the capacity of a consultant by holding periodic workshops at PS 110 on the average of once a month to introduce new materials and techniques, and to provide workshops for the establishment of reading skills centers.

f. Periodic evaluation of progress charts for the participating pupils.

g. Requisitioning and distribution of materials to each center and the maintenance of all records.

Perceptual Skills Center

The Perception Center had one experienced teacher trained in the diagnosing and remediation of perceptual problems. This teacher was employed in the program last year and was instrumental in getting the Perceptual Skills Center started at PS 110. The perceptual training teacher was responsible for providing diagnostic screening services to detect perceptual difficulties, coordinating a perceptual training program to meet the previously diagnosed needs of pupils with mild perceptual difficulties.

The perception teacher was aided in her duties by one educational assistant. The duties of the educational assistant, as outlined in the proposal, consisted of assisting the teacher in diagnostic testing, scoring of tests, remediation on a one-to-one or small group basis, aiding in maintenance of records, arrangement of materials, and other related activities under the direction of the teacher. The Perceptual Skills Center served mainly grades K-3 and was designed to service approximately 110 children.

Reading Skills Center

The Reading Skills Center had three teachers, one at PS 188, one at PS 15 and one at PS 110. The center at PS 110 had one educational assistant; PS 15 had two educational assistants; and PS 188 had three educational assistants. The educational assistants were assigned based on the proportion of eligible students in each school.

Teacher Duties

The duties of the teachers in the Reading Skills Center consisted of:

a. Pre-testing the eligible students.

b. Distributing work folders and program cards.

c. Assigning material or activities based on the individual needs of the students.

d. Periodic evaluation of the progress charts for each of the students.

e. Post-testing of the participating students.

f. Development of independent student activities.

g. Use of a variety of materials and audio-visual aides to improve the students reading level and to foster greater student independence.

h. Encouraging the students to develop positive attitudes towards reading through the use of a variety of multi-level and multi-skills materials and sharing of reading experiences.

Educational Assistant Duties

The duties of the educational assistants, as outlined in the proposal are as follows:

a. Assisting the reading teacher in the preparation of materials and supplies.

b. Individualizing instruction under the guidance of the teacher.

c. Preparing diagnostic work-up sheets.

d. Aiding in the test administration and other related work as assigned by the teacher.

The Reading Skills Center was designed to service students in grades 3-6.

Materials

One-hundred fifty-six thousand, eight-hundred and forty-seven dollars was allotted in the proposed budget for staff, instructional supplies, clerical, audio-visual supplies, and staff intradistrict car fare. The bulk of the supplies were allotted to the two newer programs at PS 15 and PS 188 since the programs at PS 110 had been, for the most part, supplied the year before.

A partial listing of the instructional materials used in the program is included in the appendix. The teacher trainer was responsible for ordering and distributing the materials to each center and for the maintenance of all records.

Student Population

School District I is located on Manhattan's Lower East Side. The ethnic composition of the district is 70% Puerto Rican, 15% Black, and 5.5% Oriental. The district has approximately 11,995 public school children who come from low-income families, the majority of which are two or more years below the national norms in reading as measured by the Metropolitan Achievement Test and other standardized tests. Over 65% of the pupils are below the 4th level on the State PEP tests in reading or below the minimum langauge competence.

Selection

Reading Skills Center: Participants in the program were those students who were two or more years below grade level as based on the standardized test scores such as the California Reading Tests, the Metropolitan Achievement Test, and the Stanford Diagnostic Reading Tests. The majority of the students were selected based on the compiled test scores from the Spring term of 1973. Those students who did not have a test score for the Spring term were tested in September of 1973 and selected upon that basis. Those students for whom no test scores were available were selected based upon teacher recommendation or request.

As of February, 1974, this phase of the program was servicing 395 students in grades 4-6. PS 110 had a roster of 82 students; PS 188 had a roster of 191 students; and PS 15 had a roster of 122 students.

Students were assigned to classes from two to five times a week based upon the extent of deficit shown and the need for remediation. The average number of times that students were assigned to classes per week was 2.7.

Perceptual Skills Center: Children in the kindergarten and other early grades were tested in the Spring of 1973 for perceptual problems. The majority of the students were tested in May of 1973. The remainder were tested in September of 1973. A battery of tests, including the WRAT, was administered to all the children in grades K-2. Other students were tested based on teacher referrals.

The Perceptual Skills Center had a roster of 32 children. The students were grouped according to deficit and need and met either two or three times a week. The groups consisted of from one to four children depending upon the need for individual or small group instruction.

Curriculum

There was no prescribed curriculum for the Uplifting Skills Program. The focus of the Reading Skills Center was to improve reading level by adapting programs to the individual needs of the children. The program also attempted to foster independence in the student's approach to reading. A wide variety of techniques were used to accomplish this goal, encouraging the students to work on their own when possible, and through this technique, attempting to encourage a positive attitude towards reading in the students.

The Perceptual Skills Center also tailored its curriculum to the individual needs of the students. Some of the areas emphasized were direction-spatial perceptual difficulties, auditory discrimination, visual-motor coordination, and auditory sequencing.

I. Procedure

Evaluation Objectives

In order to assess the Uplifting Skills Program, the following evaluation objectives were proposed and investigated.

A. Perceptual Unit
   1. Diagnosed children will achieve more in reading than their rate of learning prior to program intervention as measured by the Perceptual Search Battery and the Wide Range Achievement Test (WRAT).

B. Reading Skills Center
   1. Children will achieve more in reading than their rate of learning prior to program intervention as measured by the California Achievement Test (C.A.T.).

II. Evaluation Design

Perceptual Unit

In order to assess improvement in the children in the Perceptual Skills Unit, the Perceptual Search Battery was administered on a pre/post test basis. A "t" test was used to test the difference between means at the $p \leq .05$ level of significance. The Perceptual Search Battery tested several areas, among them the following:

1) Visual discrimination (Lamb Chop Test)
2) Discrimination recall (Lamb Chop Test)
3) Visual - Motor - Bender - Gesalt
4) Auditory Sequencing - Rate Sequence
5) Intermodal Dictation
6) Articulation
7) Figure Drawing (D-A-M Test)

The W.R.A.T. was also administered using a real vs. anticipated growth design. Mean differences between anticipated and post test scores were compared by means of a "t" test set at the $p \leq .05$ level of significance.

Reading Skills Center

To assess the objectives for the Reading Center, the C.A.T. was administered on a pre/post test basis using a real vs. anticipated growth design. Mean differences between post test scores anticipated scores were compared by means of a "t" test set at the $p \leq .05$ level of significance.

Evaluation Procedures

Classroom Observations: Each of the classes in the Uplifting Skills Program was visited at least once beginning in February. Most of the classes were visited 2 or 3 times.

Interviews and Meetings: Interviews were held with the principals of the housing schools to discuss how the program was running. Frequent meetings and interviews were held with the program coordinator to discuss program implementation and administration. The teachers in the program were interviewed at intervals throughout the year beginning in February. Several training sessions were also observed.

III. Testing

Perceptual Skills Center: The majority of the children in the kindergarten and other early grades were pretested in May of 1973. Those students who were not available for testing then were pretested in September, 1973. All students were posttested in May of 1974.

Reading Skills Center: The children in the Reading Skills Center were pretested in September, 1973. At P.S. 110, in some cases, the June 1973 post-test scores were used as September pretest scores. All students were posttested in May and June of 1974.

IV. Results

1. Classroom Observations

The classrooms at each of the housing sites were observed.

A. Perceptual Skills Center

The teacher and the paraprofessional were most often observed working with small groups (1-4 children), or in individual instruction. In cases where there was a group present, the children were usually working alone on some task aided by the teacher or the paraprofessional. The teacher and the paraprofessional seemed to have good rapport with the children. In one instance, the teacher was observed having a meeting with a parent whose child was having difficulty with the program. The teacher reported that the program was running very well and that the children were benefiting enormously from the program.

B. Reading Skills Center

The classrooms in the Reading Skills Center were very well equipped with a wide variety and range of reading material and games. The teachers and the paraprofessionals were most often observed working with small groups. The number of students in a group ranged from 2 - 16 at P.S. 110; 7 - 23 at P.S. 15; and

2 - 10 at P.S. 188. Although the number of students per group may have been high in some instances, the adult to student ratio was much smaller since the paraprofessionals usually took a group of students and worked with them individually. Moreover, in many instances, the children worked by themselves with the teacher going from child to child as they needed help.

The children in general seemed to be enjoying the classes, and enjoyed working with the novel reading materials and techniques.

C. Training Sessions

Training sessions were held throughout the year at an interval of about one session per month. During these sessions, the program coordinator introduced new teaching techniques, disseminated new materials and explained their uses, held discussions on problems in the classroom and problems in program implementation, and entertained suggestions for improvement and changes in the program. Two examples of techniques taught during the training sessions were: 1) The Fernald Method,and aid in helping to build a meaningful sight vocabulary and 2) helpful hints for teaching phonics or word attack skills.

2) Interviews

A. Principals: The principals at each of the host schools were interviewed. In general, the principals indicated that the program was running well. There were some areas that the principals indicated needed improvement. Among them were the following:

1) Communication between classroom teachers and the teachers in the Uplifting Skills Program. There were no formalized channels of communication between the teachers in the Reading Skills Center, the regular classroom, and other special programs, although the teachers did communicate on an informal basis. It was indicated that there seemed to be a need for such communication to coordinate program interventions in a manner that would guarantee maximum effectiveness for each child, avoid duplication of effort, introduce the regular classroom teachers to the techniques being used with their pupils, and allow more input from the classroom teachers.

2) More training sessions with regular classroom teachers. This would encompass modifying the role of the program coordinator so as to allow more time for training these teachers.

3) A need for more intense remediation work with some of the students.

4) Money to allow the teachers, paraprofessionals and coordinators in the program to participate in conferences and workshops on reading problems.

5) A need was expressed for greater attempts to try to involve the parents in the program.

6) A need for more special material geared towards the Spanish speaking child.

7) A clarification as to the role of the principal vis-a-vis the project coordinator. There seems to be some uncertainty as to accountability on the part of the coordinator.

B. Teachers: Each of the teachers in the program was interviewed. In general, the teachers thought the program was well coordinated and run. The opinion was expressed that the children were enjoying the program and progressing very well. Several suggestions for improvement were made:

1) More money alloted for the purchase of materials for the Perceptual Skills Center. The majority of the money was alloted to the Reading Skills Center this year.

2) Money provided for teachers to attend professional workshops and conferences on reading and perceptual problems.

C. Coordinator: Interviews with the program coordinator indicated that there were no problems in program implementation and that the program was running smoothly.

3) Test Results

A. Reading Skills Center

It was projected that students in the Reading Skills Center would achieve more on the California Achievement Test than their rate of performance prior to program intervention. The C.A.T. was administered on a pre/post test basis using a real vs. anticipated growth design. Mean differences between anticipated and post test scores were compared by means of a "t" test set at the $p \leq .05$ level of significance. The anticipated score is a version of the pretest score that has been corrected for the amount of time spent in the program and previous rate of learning. The results from the C.A.T. broken down by grade are presented below in Table I.

Table I. Reading Achievement for Reading Skills Center as Measured by C.A.T. (N=341)

	Pretest		Anticipated		Post-test			
Grade	Mean	S.D.	Mean	S.D.	Mean	S.D.	N	t
3	2.18	.459	2.53	.597	2.99	.570	16	-3.90***
4	2.46	.672	2.71	.728	3.05	.597	113	-7.17***
5	3.27	.762	3.59	.894	3.72	.924	127	-2.26*
6	3.65	.737	3.98	.829	4.22	.958	85	-2.81**
Total	3.04	.865	3.34	.972	3.59	.945	341	-6.92***

*= $p \leq .05$ **= $p \leq .01$ ***= $p \leq .001$

The results from Table I indicate that the majority of the students performed well above the projected improvement rate. Grades 3 and 4 achieved significant gains at the $p \leq .001$ level of significance, grade 5 at the $p \leq .05$ level of significance, and grade 6 at the $p \leq .01$ level of significance. These results indicate that the students are obviously benefiting from participation in the Reading Skills Center.

B. Perceptual Skills Center

It was projected that students in the Perceptual Skills Center would achieve more in reading than their rate of learning prior to program intervention as measured by the Search Battery and the W.R.A.T. The Search Battery was administered on a pre/post test basis using a "t" test to test the difference between means at the $p \leq .05$ level of significance. The W.R.A.T. was administered on a pre/post test basis using a real vs. anticipated growth design set at the $p \leq .05$ level of significance. The results from the Search Battery are presented below in Table 2.

Perceptual Search Battery: A brief description of the tests used in the Perceptual Search Battery is presented below:

a. The Lamb Chop Test - The test is divided into two areas, visual motor discrimination and discrimination recall. The child is required to match or recall assymetric figures imprinted in 8 different positions. The range of scores is from 0-8.

b. Monroe Auditory Discrimination - The child is presented with pairs of words and must distinguish whether the words are the same or different. The range of scores is from 0-20.

c. Visual-Motor Bender Gesalt - The child is presented with 9 figures which he has to copy in sequence. The Koppitz Scoring technique is used. The range of scores is from 0-25.

d. Auditory Sequencing - Rate Sequence - The child is asked about the days of the week (sequence, before, and after). The range of scores is from 0-4.

e. Articulation - The child has to repeat a word pronounced by the examiner. The range of scores is from 0-50.

f. Draw-a-Man (D.A.M.)- The child is asked to draw a human in order to determine the child's ability to determine the components of a body. The Goodenough Scale is used for scoring in which the child is given a score based on age-equivalent expectancy levels.

g. Blending - The child is tested on his ability to blend 2 sounds,diagraphs, and three sounds.

The results from the Perceptual Search Battery are presented below in Table 2.

Table 2 Comparison of Perceptual Performance as Measured by the SEARCH BATTERY (N=21)

	Pretest		Posttest			
	Mean	S.D.	Mean	S.D.	N	t
Lamb Chop Visual Motor	7.48	1.37	8.00	0.0	21	-1.76 N.S.
Lamb Chop Discrimination	6.29	1.71	7.57	.87	21	-3.58 **
Monroe Auditory Discrimination	17.81	1.75	19.05	1.20	21	-4.36 ***
Visual-Motor Bender-Gestalt	18.57	2.92	20.76	2.28	21	-4.04 ***
Auditory Sequencing	3.77	2.05	4.90	2.83	21	-2.71 **
Intermodal Dictation	8.48	2.38	9.95	0.22	21	-3.04 **
Articulation	29.14	4.83	30.52	4.36	21	-2.44 *
Draw-A-Man	7.08	1.36	7.32	2.07	21	-0.55 N.S.
Blending - Two Sounds	7.09	3.38	9.81	0.87	21	-3.99 ***
Blending - Diagraphs	3.43	3.40	9.38	2.01	21	-7.73 ***
Blending - Three Sounds	1.95	2.48	8.35	3.17	20	-7.97 ***

N.S.= Not Significant, *= $p \leq .05$, **= $p \leq .01$, ***=$p \leq .001$

The results indicate that significant gains were found in all of the areas except the D-A-M and the Visual Motor portion of the Lamb Chop Test. Although the "t" for the Visual Motor Lamb Chop Test was not significant at the $p \leq .05$ level, it was approaching significance ($p \leq .09$). Even though there is a non-significant "t" reported for this test, this does not indicate that the children had not improved since many of the children had been in the program the year before and had already reached the maximum obtainable score for this test. Therefore a "t" test done on gain scores would show zero gains for these students upon post testing since there was no room for them to improve on the test. For the remainder of the tests, the students showed significant gains. On all of the tests except Articulation, the students performed above the rate of improvement ($p \leq .01$) called for in the program proposal.

W.R.A.T.- The W.R.A.T. (Wide Range Achievement Test) subtest used was that testing oral reading achievement in which the child reads as many letters and words as possible to test the process of decoding. The results from the W.R.A.T. are presented below in Table 3.

Table 3 Oral Reading Achievement as Measured by the W.R.A.T. (N=22)

Pretest		Anticipated		Posttest			
Mean	S.D.	Mean	S.D.	Mean	S.D.	N	t
1.56	0.45	2.05	0.80	2.70	1.08	22	3.02**

**=$p \leq .01$

The results from Table 1,2 and 3 indicate that the program objectives for reading gains were met. The majority of the students performed well above the expected level showing gains at the $p \leq .01$ level of significance.

Summary and Recommendations

The children who participated in the Uplifting Skills Program seemed to be benefiting immensely. The children in both the Reading Skills Center and the Perceptual Skills Center showed gains well above those projected in the program proposal. The program in general seemed well coordinated and administered although several recommendations are being made to increase effectiveness in implementation of the program.

1) At present, there is no formalized channel of communication between the teachers in the Reading Skills Center, the regular classroom, and other special programs, although the teachers do communicate on an informal basis. There seems to be a need for more formalized communication and coordination between these three interventions to insure a program that more effectively meets the individual needs of the pupils. An effort has to be

made to ascertain that the varying techniques used in teaching the children do not conflict. This can be done by establishing regular conferences between the programs. This would allow some degree of inter-program coordination, and also would allow the classroom teachers to have more of an input as well as become more familiar with the techniques used in the varying programs.

2) There seems to be a need for more intense remediation work done with many of the students but it is not clear at present how the Reading Skills Center can best be used to achieve that goal without changing the focus of fostering independence in those students who have already reached a certain level of proficiency in reading. No definite recommendation is being made on this point at present, but it may be necessary to add more personnel so that both objectives can be attained.

3) In order for the personnel in the program to keep abreast of current developments in reading problems and programs, it has been suggested that money be alloted to allow the coordinator, teachers, and paraprofessionals to participate in professional conferences and workshops. It would be the duty of the coordinator to inform the teachers and the paraprofessionals about professional conferences and also to keep them abreast of new developments in the field.

4) An effort should be made to involve the parents in the program more. This can be accomplished by establishing a series of parent-teacher workshops.

5) Some clarification has to be made as to the role of the principal vis-a-vis the project coordinator. There seems to be some uncertainty as to accountability on the part of the coordinator. At present, the guidelines specify that the coordinator must submit a monthly progress report to the District Office of Special Funding. It is recommended that a copy of this report be sent to each of the principals in the participating schools. It is also recommended that a copy of the directive from the district office dealing directly with the functioning of the program that are sent to the program coordinators, also sent to the participating principals.

6) Since 70% of the students in the district are Spanish-speaking, it is recommended that more money be alloted for materials geared toward the Spanish-speaking child.

On an overall basis, the Uplifting Skills Program seems well run and it is recommended that the program be refunded for next year.

APPENDIX

TAXONOMY OF READING SKILLS CENTER MATERIALS

PHONICS

All phonics workbooks
Barnell-Loft; Working With Sounds
Learning Research Associates; Reading Letters, Words, Listening
EDL; Flash-X and Looking At Words Workbook
Psychotechnics; Filmstrips
SVE; Basic Phonics Filmstrips
Try this Box
Durrell-Murphy Phonics Practice Program
Lewry; Basic Phonics Program
Speech-to-Print Phonics
Readers Digest: Reading Skills Practice Pads

VOCABULARY (SPELLING)

Psychotechnics: Words and Phrases Filmstrips
EDL: Discovery Spelling
Word Analysis Cards
Reading Spectrum: Vocabulary Development
All Crossword Puzzles
RFU Jr.
Dexter & Westbrook: Word Groups
American Heritage Dictionary and Workbooks
ITA: Words and Their Structure
Reading Skills Lab.

COMPREHENSION SKILLS

MAIN IDEA

Barnell-Loft: Getting the Main Idea
Random House Pacemakers: Skillcards (and books, of course)
Skill Pacers
Reading Skills Practice Pads
ITA: Thinking and Understanding
Reading for Meaning
Be a Better Reader
Reading for Concepts
Cornerstone Readers
Reading Spectrum: Reading Comprehension
L.R.A.: Word Attack and Comprehension
Gates-Peardon: Preparatory and Introductory Reading Lessons, What is the Story About?

COMPREHENSION SKILLS (cont.)

INFERENCE (DRAWING CONCLUSIONS)

Barnell-Loft: Drawing Conclusions
R.S.P.P.
Cornerstone Readers
ITA: Thinking & Understanding
Random House: Skill Pacer
EDL: Reading Filmstrips
Study Skills Library

SEQUENCE AND ORDER

ITA: Thinking and Understanding
B-L: Detecting the Sequence
R.H. Pacemakers: Skill Pacers
Cornerstone Readers
R.S.P.P.
R.S.L.: Blue Book

READING FOR DETAIL

B-L: Getting the Facts
Locating the Answer
Gates-Peardon: Prep. and Introd. Reading Lessons
Reading for Detail
McCall-Harby, McCall-Crabb Reading Lessons
Cornerstone Readers
RFM
Reading for Concepts
R.S.P.P.

MISCELLANEOUS AND GENERAL COMPREHENSION

Reading Attainment Series
Addison-Wesley: Reading Development Kits
Be a Better Reader
Cornerstone Readers
Reading for Concepts
R.S.P.P.
Gates-Peardon: Prep and Intro.
Dexter & Westbrook: Understanding Questions
L.R.A.: Word Attack and Comprehension
Weekly Reader: Read, Study, Think
Dimension 99
S.R.A.: Reading Labs., Pilot Library, We Are Black

PHONICS, COMPREHENSION, STUDY SKILLS - SUBJECT AREAS

EDL: Study Skills Library (Science, Social Studies)
Study Skills Library - Reference
ITA: Reference
Dimension 99 (Science)

PHONICS, COMPREHENSION, STUDY SKILLS (cont.)

Programmed Geography
EDL: Reading Filmstrips
Psychotechnics: Reading Filmstrips
Weekly Reader: Table and Graph Skills
Science Stories
People Profiles

LISTENING SKILLS

S.R.A.: Listening Skills
D.C. Heath Minisystems: Comprehension and Sequencing
Sequencing of Directions
L.R.A.: Listening 1 and 2

FOLLOWING DIRECTIONS

B-L: Following Directions
Heath Minisystems: Sequencing of Directions
Gates-Peardon: Following Directions

BLACK STUDIES APPROACH TO READING AND MATH

Program Description

Goals

The Black Studies program was designed to improve reading and mathematics performance in those students who were two or more years below grade level. Although the program did not exclude other ethnic groups, the primary focus of this program is on those black students who suffer severely from lack of positive self-esteem and, as a result, have little or no success in achieving under the traditional curriculum. This program was designed to supplement the regular school program. Remediation and instruction concentrated on supplying high interest, low reading level, relevant materials that would motivate those students who had difficulties in coping with the traditional classroom curriculum. As outlined in the proposal, the objectives of the program were to place emphasis on the following needs and priorities:

a. Providing a special cultural and educational framework of Black studies to improve the reading skills of the Black pupil.

b. Providing a socially and culturally conducive environment to improve computational skills of ethnically, economically and educationally disadvantaged pupils who are severely retarded in basic mathematical skills.

c. Providing a new humanistic approach so that Black pupils can be provided with inspirational models and opportunities for success and develop positive self-images which will lead to further success in school.

d. Providing a viable alternative for those students who are deficient in reading and math because of the rejection of the traditional curriculum and who are unable to function in a regular classroom structure.

The overall objective of the program was to provide the pupils with special reading materials to develop positive self-image, remediation services, individualized instruction, lower teacher-pupil ratio, more use of audio-visual equipment, and staff follow-up to help the student experience educational success.

The program operated during the regular school hours from 8:40 A.M. to 3:00 P.M.

Sites

In the planning stages, the Black Studies Program was to be housed at PS 34, JHS 22, and the classroom housed at the Negro Action Group (NAG), 270-2 East 2nd Street, N.Y., N.Y. Due to unexpected complications, the sites at PS 34 and NAG were replaced by PS 188.

The program at JHS 22 serviced grades 7-9 and had four teachers and 3 paraprofessionals for approximately 656 students in the combined reading and mathematics program. The program at PS 188 housed both the K-2 program and the program for the upper grades. PS 188 had five teachers and three paraprofessionals and serviced approximately 164 students.

Due to problems in funding, budget cuts, personnel freezes, etc., the Black Studies program was not able to start classes on the proposal date of September 5, 1973. The program was funded to begin in October and actually commenced on February 28, 1974. As a result classroom space that was originally allotted to the program was reassigned to other programs and formerly available teachers got other jobs. At the commencement of the program, there were problems in securing new classroom space and resulted in some of the teachers having to share classrooms.

Staffing

The staff of the Black Studies Program consisted of one teacher-trainer coordinator, 9 teachers and 6 para-professionals. There were still two positions open for para-professionals since some of the staff previously serving as para-professionals have been approved as teachers and have been assigned classes. The program coordinator continued attempts to fill those positions. The program also has the services of a clerk-typist.

Coordinator: The program coordinator, an experienced teacher, originally was assigned to the district office and worked from 9-5. He was subsequently removed from the District Administration budget and reassigned as a teacher trainer. He still maintained his office at the District site. The coordinator was responsible for overall coordination and implementation of the program. His duties consisted of:

a. Providing orientation of the staff, parents, principals, and teachers of the housing schools regarding the philosphy, objectives and the contents of the program.

b. Consulting and planning with his staff to implement all program activities such as instruction, testing, and curriculum planning.

c. Conducting training sessions and orientation of his staff; conducting workshops, and supervising the development of curriculum materials.

d. Administrative functions of the program such as the maintenance of inventory, fiscal records, requisitioning of supplies and instructional materials, submission of accurate and punctual payroll service reports and other related items.

The teacher trainer coordinator was to devote 51% of his time to the above activities of training and direct classroom activities.

Teachers: The Black Studies Program employed a total of 9 teachers. Five teachers were assigned to PS 188 and four were assigned to JHS 22. Due to delays in starting the program, teachers who were originally available for the program found new jobs. As a result, teachers were being hired up until May 20th, 1974. In PS 188, there was one teacher for kindergarten and part of the first grade; one teacher for the remainder of the first grade and the second grade;

one teacher each for third and fourth grade; and one teacher for fifth and sixth grades combined. These teachers taught both reading and math.

In JHS 22, the four teachers were distributed throughout the grades teaching reading and math. A schedule of when the classes began for each of the schools is listed below in Table I.

TABLE I
Dates Classes Began By Grade For Both Schools

Grades	Date Began
K-1	2/29/74
2	2/29/74
3	4/24/74
4	4/24/74
5	1/ 7/74
6	1/ 7/74
7	3/ 1/74
8	4/24/74
9	5/20/74

The teachers in the program were licensed or certified professionals who were qualified in the subject matter of teaching reading and mathematics as well as Black Studies. The duties of the teachers were as follows:

a. Providing the necessary instruction to upgrade the basic skills of English and mathematics within the framework of the Black Studies instructional media approach.

b. Recognizing learning disabilities and providing remedial techniques.

c. Maintaining progress charts and records reflecting program procedures; evaluation and continuous assessment of pupils.

d. Providing immediate feedback to students on their work as a result of maintenance of progress records.

e. Serving as role models for the pupils.

f. Preparing materials developed during program implementation foruse in the classrooms.

g. Providing individualized and small group instruction.

Para-professionals: The program had a total of six para-professionals, three at PS 188 and two at JHS 22. Several of the para-professionals were reassigned to teacher slots upon receipt of certification, leaving two para-professional positions open.

The Black Studies program was intended to fully involve the para-professionals in the teaching and running of the classroom. The program was structured so as to allow enough flexibility for para-professionals to provide instruction either on a one-to-one basis, in small groups or to an entire class, under the supervision of the teacher. The duties of the para-professionals as outlined in the proposal were as follows:

a. Providing instructional support as well as serving as role models for the pupils.

b. Aiding the teacher by providing individualized or small group instruction in mathematics, reading, or other subject matter through such activities as use of audio-visual materials, library reading instruction, manipulative materials, instructional game activities, and remediation.

c. Assisting in classroom management and in maintaining a wholesome classroom atmosphere.

d. Actively participating in the preparation of classroom materials and in the selection of activities, materials and resources.

e. Clerical, monitoring, escort duties and other related classroom activity.

Clerk-typist: The program was not able to secure a permanent clerk-typist until the end of April placing the burden of much of the paper work and typing on the program coordinator.

Materials

A diagnostic-prescriptive approach to reading was used. Special reading materials such as the African Reading Kits, Golden Legacy and New Dimensions sets were used to supplement basic instructional materials. Teacher made materials were used when commercial materials were lacking or inappropriate. In addition, some of the material taken from math and English text books was rewritten to more adequately conform to the individual needs of the pupils.

The math program utilized a wide variety of equipment and materials, some of which was supplied by the housing schools. In addition, teacher made material was also used. A partial listing of the materials used in the program is included in the appendix.

Student Population

District One has a total of 11,995 public school children who come from low income families. Fifteen percent of the pupils are Black and most of them are far below the national norm in reading and mathematics as measured by the Metropolitan Achievement tests. Although the program did not exclude other ethnic groups, its primary focus was on black students.

Participants in the program were those students who were two or more years below grade level in reading and mathematics as based on the standardized test scores. Other criteria also included a history of poor attendance and achievement. Tests, questionnaires and guidance referrals were used to identify pupils whose academic performance levels were adversely affected by their adjustment to the traditional curriculum and classroom environment.

The proposal called for the program to service approximately 500 students with the service of seven teachers. However, two additional teachers were assigned for a total of 9 teachers. The total number of students serviced by the program was approximately 614. Since new teachers were still being assigned and classes scheduled at the time of this report, the total number of students serviced was still in flux. The site at PS 188 serviced approximately 164 students in grades K-6, and JHS 22 serviced approximately 656 students in grades 7-9.

Curriculum

The curriculum in the Black Studies Program was geared towards providing a novel approach employing techniques that incorporate a black perspective into the teaching of reading and math. These techniques are intended to raise the interest and motivation level of those black students who had not been adequately motivated by the traditional approach to these subject matter. A prescriptive-diagnostic approach to instruction was used where ever applicable.

Students were assigned to classes from 2 to 5 times a week based on the individual needs of the students. Since most of the students were deficient in both reading and math, they were assigned to both reading and math, they were assigned to both classes.

RELATED STUDIES

Irwin Katz (1967) in his paper on "The Socialization of Academic Motivation in Minority Group Children" reported that Black students were one standard deviation below the mean white score in puplic schools. This relationship held true at all grade levels and all regions of the country. Many other writers (Coleman; 1966; Jencks) have produced data to substantiate this claim. Katz in postulating a casue for this phenomenon cited lack of motivation among Black students. He made a revealing remark when he stated that "the evidence of favorable motivational effects on minority children's learning is not very strong, however, in the absence of compelling evidence to the contrary, common sense suggests that a strengthening of the will to learn will lead to higher achievement". (Katz, 1967, p. 136).

Clark (1965) points out that many Black students suffer from low self-esteem and that this, in effect is often caused and compounded by an educational system that does not expect Black children to learn. Often in the process of relaying these expectations, the educational system creates low and negative self-esteem among Black students. Many people have gegun to realize that the educational system has failed to positively relate to and motivate these students. As described by Katz in describing the notion of cultural conflict "many minority groups have distinctive systems of values and goals that are not taken into account by the school". Often a lack of demonstrates motivation by these students is nothing more than an indication that the subject matter and manner of approach to learning associated with the traditional school system is not relevant to the sub-culture to which he has been socialized.

Evaluation Objectives

The evaluation objectives spelled out in the program proposal as a means of assessing pupil improvement are:

a. Pupils will achieve more in reading English than their rate of learning prior to program intervention. Alternate forms of the California Achievement Test in reading comprehension, vocabulary and total reading was administered on a pre-post test basis to grades 1-9. Kindergarten children were to be administered a teacher made reading test.

b. Pupils will achieve more in mathematics than their rate of learning prior to program intervention as measured by the MAT test in math administered on a pre-post test basis.

Procedure

Interviews: Several interviews were held with the program coordinators, teachers, para-professionals, and principals of the housing schools. Information was collected on how the program was operating, problems and program implementation, etc.

Classroom Observations: Classroom observations were made of a class at each grade level for each of the housing schools. Each classroom was visited at least once and some more than once. Each observation lasted between 30 and 50 minutes depending on the complexity of the classroom situation.

Results

Principal Interviews: The principals of the housing schools indicated that the program was operating well. It was reported that there was some difficulty in securing classroom space due to the lateness of the program getting started.

One principal reported that there was some initial subtle resistance on the part of some of the teachers to releasing the students to the Black Studies Program. Subsequently, meetings were held with the teachers to make sure that they understood the purpose and the goals of the program.

In the junior high school, the principal reported that there was an absentee problem with some of the students. This was partly because many of the students in the program have a high truancy rate.

Both of the principals reported that the students seemed to be benefiting from and enjoying the Black Studies Program and expressed a desire to see the Black Studies Program succeed.

Teachers and Paraprofessionals: The teachers and para-professionals employed in the Black Studies Program seemed highly motivated and interested in seeing the students benefit from the Black studies approach. The teachers reported that there were some initial problems in scheduling since many of the students had been assigned to other programs.

Observations

Classroom space: Due to the lateness in the program getting started, there was some difficulty in getting classroom space. In the elementary school, the K-2 grades had to use rooms in the auditorium for classes and the 3rd and 4th grade teachers had to share a classroom. In the junior high school, the teachers also did not have enough space and often had to schedule classes so as to be able to find free space when other programs were not using their rooms. The rooms were often decorated with colorful and informative posters on Black History. Prominent Black people and their achievements was posted on the bulletin boards.

Curriculum and Materials: A variety of materials were used by the teachers. In the lower grades, since most of the written materials was above the level of the students, a great deal of teacher made material was used. A typical lesson for grades K-1 was on the topic of skin color. Epidermis and dermio was explained and the children examined their skin under a magnifying glass.

The teachers were required to submit to the program coordinator a copy of one of their successfully taught lessons at the end of each week. A copy of some of the lesson plans submitted and a partial listing of some of the materials used was included in the appendix.

Classroom Registers: In the elementary school, the register of students ranged from two to twelve students per class. The average class size reported was six. The students attended classes from 2 to 5 times a week depending on the individual needs of the students. The classes lasted from 40 to 45 minutes each.

In the junior high school, the classroom register ranged from 12 to 18. The average class size was 15 students. Each group came to class twice a week for 50 minutes.

EVALUATION OBJECTIVES:

In order to determine the extent to which the program goals were being accomplished, the following evaluation objectives were investigated:

A. Students will achieve more in reading English than their rate of learning prior to program intervention. To assess this objective, the Metropolitan Achievement Test and CAT in reading was administered. Mean differences were compared on a real v.s. anticipated design by means of a "t" test set at the $P \leq .05$ level of significance.

B. Students will achieve more in mathematics than their rate of learning prior to program intervention. The MAT in Math was administered. Differences were compared on a real v.s. anticipated design by means of a "t" test set at the $P \leq .05$ level of significance.

RESULTS: READING:

The Achievement Tests in reading were administered on a pre/post test basis using a real v.s. anticipated growth design. Mean differences between post test scores and anticipated scores were compared by means of a "t" test set at the $P \leq .05$ level of significance. The anticipated score is a variation of the pre-test score corrected for length of time in the program.

The result from the reading test for grades 1-6 are presented below in Table I.

TABLE I
READING ACHIEVEMENT BY GRADES
(Elementary)

GRADE	PRE-TEST		ANTICIPATED		POST TEST				
	Mean	S.D.	Mean	S.D.	Mean	S.D.	N	U	
1	2.0429	0.500	2.1918	.571	2.4714	.472	7	-1.87	n.s.
2	2.2067	1.654	2.2776	1.751	2.2300	1.678	30	-11	n.s.
3	3.333	1.388	3.5062	1.490	3.3600	2.213	15	-50	n.s.
4	3.0706	.789	3.1339	0.813	2.9000	.662	17	1.83	n.s.
5	2.9600	.525	3.0017	.537	3.2900	.597	10	-2.42	*
6	3.5545	.935	3.5994	.952	3.8455	.896	11	-1.53	n.s.
TOTAL	2.7933	1.322	2.8794	1.387	2.8789	1.495	90	0.00	n.s.

n.s. = not significant

* = $P \leq .05$ level of significance

The results for reading for grades 1-6 indicate that there was no significant gain in reading. Although grades 1, 2, 3 and 6 did not show a significant gain, there was an improvement in reading scores from the pretest to the post test administration.

TABLE II
READING ACHIEVEMENT BY GRADES
(Secondary)

GRADE	PRE-TEST		ANTICIPATED		POST TEST			
	Mean	S.D.	Mean	S.D.	Mean	S.D.	N	T
7	4.4739	.956	5.0834	1.124	5.0261	.942	46	.28 n.s.
8	4.8300	.946	5.4016	1.088	5.2500	1.363	50	.76 n.s.
9	5.2716	1.018	5.8264	1.151	5.4833	1.819	60	1.68 n.s.
TOTAL	4.8948	1.026	5.4711	1.158	5.2737	1.463	156	1.68 n.s.

The results show that there was no significant gain between anticipated and post test scores for grade 7-9. Although the differences were not significant comparing post test to anticipated scores, there was a gain shown from the time the students were pretested to when they were post tested. Comparing the pretest score for grades seven (4.4739) to the post test score (5.0261), one gets a significant "t" at the $P \leq .005$ level. For grade eight, comparing the pretest scores to the post test scores, a significant "t" at the $P \leq .05$ is found. Thus real difference between pre and post test scores exist. However, the anticipated scores above those differences. The implication this has is that gains were real but there is no way of telling if they would have existed during the normal educational growth of the children.

MATH:

The M.A.T. in math was administered on a pre/post test basis using the differences were compared using a "t" test set at the $P \leq .05$ level of significance. The combined results for grades 7-9 are presented below in Table III.

TABLE III
MATHEMATICS ACHIEVEMENT FOR GRADES 7-9
(NE 35)

PRE TEST	Mean	S.D.	POST TEST	Mean	S.D.	N	T
	4.87	.80		4.67	.75	35	-.036 n.s.

n.s. = not significant

The results for grades 7-9 show that there was not a significant gain in reading scores for grades 7-9, at the $P \leq .05$ level of significance.

The results show a decline in scores for this grade level. However this decline is well within the four months time of measurement for the test. At this level this doesn't represent actual decline on the part of the children but rather random frustration of the testing instrument itself. There is every likelihood that some achievement given account but were an increase in skills not measured by the M.A.T.

SUMMARY:

In general there were no significant gains in reading in grades 1-9 using a real v.s. anticipated growth design. Grade 5 was the only grade that showed a significant gain. However, if one compared pre-test scores to post test scores, there was an improvement shown in reading for the students in the program. The math scores for grades 7-9 showed no significant gain.

One possible explanation for the non-significant gains was the length of time the students spent in the program. The average length of time between pre and post testing was 1.2 months. This short span of time was probably not sufficient for the majority of students to start making significant gains.

Another possible explanation for the results is the assumption made by the evaluation design that learning takes place in a linear fashion. In other words, it is assumed that the child learns a certain amount of information everyday or every month and that the amount learned is consistant from one month to the next leading to a step-wise, straight line progression in learning. On the other hand, it may be that learning does not take place in such an orderly straight line manner. It may be that a child accumulates a large amount of information before that information is organized in a manner that can be detected on any achievement test. A child, although he is exposed to information, may not be able to organize that information in any measurable way until months after he is exposed to that information.

CONCLUSIONS AND RECOMMENDATIONS:

It is concluded that although the Black students program did not show the significant gains in reading and math outlined in the evaluation proposal, this lack of gain may not have been due to features inherent in the program's approach but instead to extraneous intervening variables. One major problem was with the lateness with which the program began. The program did not officially begin until the end of February at which point there were problems in obtaining classroom space and teachers. Many of the classes did not begin until April and May. Since many of the students were only in the program for on or two months, significant gains in reading and math may not have been possible. Even within these constraints, the majority of the students showed an improvement in reading from the pre-test to the post test.

The teachers and paraprofessionals in the program were dedicated and genuinely concerned about their students. The principals interviewed, felt that the program was running well and was benefitting the students.

RECOMMENDATIONS:

As previously mentioned, many recent works have outlined Black students for an approach to learning that increases, their self-esteem and gives meaning to the learning experiences. The Black students approach to Reading and Mathematics Program seems to be taking a step in this direction. It is recommended that the program be refunded for September. This would alter the teachers to:

1. Have stable classrooms.
2. Be able to select students before they are reassigned to other programs.
3. Be able to work with students over a long enough time period as to demonstrate significant gains in learning.
4. Secure qualified teachers who will work and continue in the program throughout the school year.